A STUDY OF HOMELESS FAMILIES IN NEW YORK CITY: RISK ASSESSMENT MODELS AND STRATEGIES FOR PREVENTION

(FINAL REPORT: VOLUME 1)

BY
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PREPARED FOR:
THE HUMAN RESOURCES ADMINISTRATION

Health Research Program

of New York University

SEPTEMBER, 1989

The Robert F. Wagner Graduate School of Public Service

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NOTE ON STRUCTURE OF THE REPORT

This report is one volume of the Final Report for the New York University Study of Homeless Families that has been conducted for the New York City Human Resources Administration. The Final Report is comprised of four distinct volumes:

Volume 1: A STUDY OF HOMELESS FAMILIES IN NEW YORK CITY: RISK ASSESSMENT MODELS AND STRATEGIES FOR PREVENTION.

Volume 2: A STUDY OF HOMELESS FAMILIES IN NEW YORK CITY: CHARACTERISTRICS AND COMPARISONS WITH OTHER PUBLIC ASSISTANCE FAMILIES.

Volume 3: FORECASTING MODELS TO TARGET FAMILIES AT HIGH RISK OF HOMELESSNESS.

Volume 4: IMPLICATIONS OF THE NYU STUDY OF HOMELESS FAMILIES FOR PUBLIC POLICY.

TABLE OF CONTENTS

page

I. INTRODUCTION....................................1

II. METHODS..4

III. ELEVEN KEY FINDINGS...........................8

FINDING 1: SHELTER USE APPEARS TO BE A "LAST CHOICE" OPTION FOR FAMILIES....................................8

FINDING 2: LIVING WITH OTHERS IS A KEY PREDICTOR OF SHELTER USE....................................9

FINDING 3: PREVIOUS SHELTER USE INCREASES THE RISK OF REPEAT USE....................................12

FINDING 4: EVICTIONS ARE AN IMPORTANT CORRELATE OF SHELTER USE FOR PRIMARY TENANTS......................14

FINDING 5: PREGNANCY AND RECENT BIRTHS CONTRIBUTE TO A FAMILY'S RISK OF NEEDING EMERGENCY SHELTER.........16

FINDING 6: DISRUPTIVE EXPERIENCES ELEVATE THE LIKELIHOOD OF HOMELESSNESS...........................18

FINDING 7: FEW REPORT SUBSTANCE ABUSE, BUT THOSE WHO REPORTED PROBLEMS ARE AT ELEVATED RISK...............19

FINDING 8: HOMELESS FAMILIES ARE MUCH YOUNGER ON AVERAGE THAN HOUSED PUBLIC ASSISTANCE FAMILIES.......20

FINDING 9: BLACK FAMILIES ARE MORE LIKELY TO SEEK EMERGENCY HOUSING THAN OTHER FAMILIES................21

FINDING 10: ALTHOUGH ADMINISTRATIVE CLOSINGS ARE MORE COMMON AMONG SHELTER REQUESTERS, THEIR IMPACT ON HOMELESSNESS IS INDIRECT............................22

FINDING 11: THE LENGTH OF A SHELTER STAY IS VERY DEPENDENT ON THE SIZE OF THE FAMILY..................23

IV. FIVE POSSIBLE MISCONCEPTIONS CLARIFIED BY THE STUDY..24

V. FORECASTING WITH SURVEY AND ADMINISTRATIVE DATA......27

VI. POLICY OPTIONS.................................32

VII. CONCLUSIONS AND IMPLICATIONS FOR POLICIES TO PREVENT HOMELESSNESS....................................38

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I. INTRODUCTION

During the past decade, the problem of homelessness among families in New York City has commanded the attention of both the general public, which consistently ranks the problem as a major social concern, and individuals responsible for social policy in the governmental, non-profit, and advocacy communities. This problem is not a new one, but the scope and visibility of the problem has increased in the 1980s especially among female-headed families that include young and vulnerable children. Although the problem of homelessness among individuals is even larger and more visible, it is estimated that family members now comprise one third of the overall homeless population across the country.

Public policy in New York City is attacking this problem on numerous fronts. Most importantly, the City has begun to rehabilitate low-income housing at faster rates than in the past, although the supply still is not increasing fast enough to solve the underlying problem of scarce low income housing in the foreseeable future. The city government also has responded to pressure to improve the quality of shelters by commencing the transfer of families currently housed in hotels to various types of temporary housing operated by non-profit agencies.

It is generally agreed, however, that emergency housing is usually the least desirable solution for providing shelter to low income families. Because of this, the city government has been interested in methods to head off episodes of shelter use among families with housing problems. That is, the City has been attempting to develop initiatives that might ameliorate the effects of crowding, displacement, and housing inadequacy that accompany the current housing situation. By working to stabilize families in existing housing situations, the City could reduce the need for expensive and psychologically stressful episodes of shelter use.

The Human Resources Administration (HRA) is the agency responsible for running the emergency housing system in New York City. The agency also has taken the lead in attempting to understand the dynamics of homelessness among families and to develop preventive service initiatives that might reduce episodes of shelter use among low income families.

This report presents the findings from a twenty-two month study that addressed three questions concerning homelessness among families:

1) What are the characteristics of families that use the City's shelter system compared to public assistance

families that manage to remain housed outside of the shelter system?

2) Is it possible to identify in advance families at high risk of using the City shelter system?

3) If families at high risk can be targeted, what types of public initiatives might stabilize existing housing arrangements and thus reduce the incidence of shelter use?

The study, which was conducted by researchers at New York University under contract with the Human Resources Administration, involved extensive data collection and analysis related to the experiences of 1,228 New York City families. The primary source of data was an in-person survey, conducted by Louis Harris and Associates, of 704 homeless families as they requested shelter at emergency assistance units (EAUs) and 524 public assistance families during their scheduled recertification interviews at income maintenance centers (IMCs).

The survey included numerous questions about housing history, family structure, social relationships, interpersonal and social problems experienced by the families (such as substance abuse, physical abuse, and health problems), relationships with social service providers, and education/employment experience. In addition to these survey data, the project collected information from HRA's administrative records that might be useful in identifying differences in risk factors for homelessness across the sample.

The data set that has been assembled to describe the 1,228 families represents an unusually rich source of information about the homeless families population and about a representative sample of the public assistance family population. Never before has such a comprehensive source of data been available for a large and representative sample of homeless families, especially a data set that would allow valid inferences about how these homeless families differ from a comparison sample of housed families. In fact, very limited survey data have been available in New York previously to describe the general public assistance population's housing arrangements and social situations.

This report presents the general findings of the project concerning answers to the three central questions posed above. The following section presents a brief overview of the methods used in the study. Sections three and four address question one by presenting eleven key findings about the dynamics of homelessness among New York City families and by reviewing five potential misconceptions about the characteristics of homeless families that are clarified by the study.

The central component of the project has been the development of a technical forecasting model that will allow HRA to identify in advance families at high risk of becoming homeless. Section five of the report explains the forecasting model that has been developed and reports on the effectiveness of the model for targeting high risk families. Section six then discusses policy options that should be considered to help reduce the incidence of shelter use among the families identified as being at high risk of using the emergency housing system.

This report represents volume one of the project's final report. Three other volumes present more detail concerning the analysis conducted to answer each of the three questions addressed by the study. The titles of these volumes are listed at the beginning of this report.

II. METHODS

In selecting methods to guide this project, the central concern has been to develop a data base that can be used to develop a model to forecast which families are at highest risk of requiring the use of the City shelter system. HRA's primary interest in sponsoring the project was to help in improving its ability to target families at highest risk of becoming homeless.

This primary focus shaped the research design in a number of ways. First, it was necessary to sample large enough numbers of both homeless families and housed families to support the multivariate statistical analysis that would be necessary. Second, the collection of information was restricted to types of data that HRA might be able to collect on an ongoing basis. Some types of data (for example a thirty minute psychological scale) might conceivably distinguish homeless and housed families, but it would be impractical to gather such information for all 230,000 public assistance families on a continuing basis.

The key feature of the data set assembled to do the forecasting analysis is that it is comprised of two independently selected subsamples: a random sample of families that seek emergency housing and a representative sample of public assistance families. These are termed "choice-based" samples because they are formed based on a behavioral characteristic (in this case, use or non-use of the emergency housing system).

For the subsample of homeless families, data were collected from families on public assistance that requested shelter through the EAUs during the hours of 5 p.m. and 11 p.m., Monday through Friday, in Brooklyn, Manhattan, and the Bronx. The vast majority of requests for shelter are made by families at these sites during the stated hours. Interviewers screened respondents while they waited to go through the intake procedures at the EAUs. Only those individuals who 1) were currently on public assistance or had been on public assistance during the last six months, 2) had not been in a shelter for at least 31 days and 3) had children (or were pregnant) at the time of their request for shelter were deemed eligible for inclusion in the sample. This ensured that the sample was comprised solely of welfare families for whom this was a new episode of shelter entry. All told, 6,526 individuals were screened at the EAUs, but only 972 (15%) met the eligibility requirements. A great many of those screened had been in the shelters at some time during the last month. Of those meeting the criteria, 704 (72%) were interviewed. These interviews took place during the first seven months of 1988.

Families in the comparison, or IMC, group were selected on the basis of a stratified random sample; they were interviewed at mandatory recertification appointments that are scheduled at the IMCs several times each year. Twelve of the City's 40 IMCs were randomly selected for inclusion in the study with sampling probability proportionate to size. A quota of approximately 35 interviews per IMC was established and cases were selected from among those seen by 12 randomly selected eligibility specialists at each center. The scheduled appointments were used to ensure an unbiased selection of cases for inclusion in the study. These interviews also took place during the first half of 1988.

In addition to using this method to interview those heads of families who arrived for their scheduled appointments, interviewers were required to enumerate those families who did not show up for their recertification appointment. A sample of respondents in these families was interviewed during a rescheduled visit or by telephone.

A total of 745 families scheduled for their recertification appointments were selected for the study, using the method described above. A total of 524 selected families agreed to participate in the study, for an overall response rate of 70 percent. These figures include 36 families who did not show up for their original appointment and who were interviewed during their re-scheduled appointment at the IMC or by phone. The 524 public assistance respondents include an oversample of 76 Black respondents who were surveyed using the procedures described above at two IMC's to insure stability of ethnic comparisons. Such oversampling was necessitated by the fact that the original sample did not include a sufficient number of blacks to permit subgroup analyses. Ninety-five percent of those interviewed were women.

For each factor discussed in the following sections of the report, the sample distributions are provided for both the EAU and IMC samples. The risk of homelessness for different subgroups of the sample also are presented in many cases. The risk of homelessness is an estimate of the frequency that families of a given type enter the emergency housing system. Since our sample was selected to include more homeless families than you would find in a simple random sample of all public assistance families, we had to weight our data to calculate the risk of homelessness that should be expected for different types of families that comprise the City's public assistance population.

In addition to estimating simple risks of homelessness for different types of families, we estimated a multiple regression model to assess the impacts of a large set of potential causal factors on risk of homelessness. The multiple regression analysis allows estimates of the separate and distinct effects of individual risk factors by statistically adjusting for differences across the two samples in a range of risk factors. The multiple regression analysis also was used to develop the forecasting analysis that is used to identify families at highest risk of homelessness.

One caveat concerning the analysis presented in this report is that the homeless sample is actually comprised of shelter requesters, not users. Approximately 15 percent of the families we interviewed at an EAU as they requested emergency housing either did not wait the two or more hours it takes to obtain an assignment or never showed up at the shelter where they were assigned. Related to this is the fact that approximately three percent of the sample of housed families that comprise the comparison sample could be expected to request emergency housing during the year after we interviewed them. Our analysis treats the samples as if they are "stocks" of housed families and homeless families. In fact, some families "flow" from situation to situation over the course of time.

Another delimitation of the study is that the data set only includes public assistance families. Approximately 10 percent of the families entering emergency housing in New York City were not previously public assistance recipients. Although such families receive emergency housing, we did not interview them since a valid comparison sample could not be obtained. Our analysis also excludes shelter requesters who come to the City due to building fires. These families receive assistance through the Department of Housing Preservation and Development, and do not flow through the EAUs. In restricting the sample to public assistance families, our aim is to focus on the high risk population which potentially can be targeted and helped by HRA before the need for emergency housing becomes acute.

Table 1 presents a demographic profile of the sample of shelter requesters and the comparison sample. In both samples, the respondents were overwhelmingly female. The shelter requester sample has a higher proportion of black respondents than does the comparison sample and a higher proportion of younger families (these findings are discussed in detail later in the report). The EAU respondents also were more likely to report being married than those in the IMC sample. This may be due to the fact that there is more incentive for those seeking shelter to admit being married in order to facilitate placement as a couple with children. For those interviewed at the IMCs, admitting to the presence of a husband or boyfriend could have been feared to result in withdrawal of benefits.

III. ELEVEN KEY FINDINGS

FINDING 1: SHELTER USE APPEARS TO BE A "LAST CHOICE" OPTION FOR FAMILIES

The survey collected information about three elements of the families' recent housing experiences: 1) about the place stayed the night before the interview, 2) about the place where the family spent the longest period of time during the previous twelve months, and 3) about the last place where the family was the primary tenant.

Only 18 percent of those families in our shelter requester sample were primary tenants at the place they stayed the previous evening (see Table 2). Most of the families (71 percent) had stayed with families and friends the previous evening (i.e., they were in what we call "doubled up" situations). In addition, 11 percent had stayed in various public places, including hospitals, subways, and abandoned buildings.

Even for the 18 percent of families who came directly from their own apartments to a city shelter, nine out of ten had moved at least once during the previous twelve months and the place stayed at the previous evening was not the place where they spent the most amount of time in the last year. Thus, virtually every family in the shelter requester sample first spent some time either living with families and friends or moving from apartment to apartment before seeking shelter at an EAU.

Why did families leave the place they stayed at just prior to entering a shelter? Evictions accounted for 16 percent of the reported reasons for leaving this place (of those who were in their own place the night before requesting shelter, 48 percent had to leave because of eviction), and 5 percent of the families left for other rent or landlord problems (see Table 3). Building problems, such as fires or condemnations or no heat, accounted for 7 percent of the reasons for leaving. However, by far, the most frequent reason for leaving was a problem with the primary tenant when the family was "doubled up." Usually the problem involved a fight or disagreement of one sort or another.

In general, the shelter requesters had experienced frequent residential moves during the period before coming to the EAUs. Fifty-eight percent reported having stayed at two or more places in the past year, and it is possible that respondents did not include short stays at friends just prior to entering a shelter in counting their residences. Just 14 percent of the IMC sample had moved in the past year.

Table 1

Demographic Profile for the EAU and IMC Samples

	EAU	IMC
Sample Size	704	524
Ethnicity/Race		
Black, Not Hispanic	54%	32%
Puerto Rican	33%	41%
Other Hispanic	7%	18%
White	4%	5%
Other	2%	4%
	100%	100%
Gender		
Female	96%	95%
Male	4%	5%
	100%	100%
Location of EAU/IMC Interview		
Manhattan	40%	11%
Bronx	38%	26%
Queens	1%	13%
Brooklyn	21%	49%
	100%	100%
Marital Status		
Married or Living with Boyfriend/Girlfriend	23%	9%
Separated or Divorced	19%	44%
Widowed	1%	3%
Single	56%	44%
	100%	100%
Age of Respondents		
25 or younger	44%	18%
26–30	29%	21%
31–40	23%	35%
40 or older	4%	26%
	100%	100%

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Table 2
Place Stayed Last Night

	EAU	IMC
Own Place	18%	88%
Parents	15%	7%
Relatives	19%	2%
Boyfriend	2%	0%
Other Friends	35%	3%
Public Places – All Others	11%	0%

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Table 3

Reasons for Leaving the Place Stayed at Last Night

	Complete EAU Sample	Families Staying with Others Last Night	Families Staying with Others Last Year	Families with Own Place Last Year
Sample Size	701	573	441	260
Eviction				
Rent Related	9%	5%	4%	20%
Not Rent Related	7%	4%	2%	12%
Other Reasons Related to Rent or Landlord	5%	4%	3%	9%
Problems with Persons Who Share Apartment	58%	69%	75%	31%
Problems with Apartment Building	7%	5%	3%	14%
All Other	14%	13%	13%	14%

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and and Public Assistance Families, conducted for the NYC Human Resources Administration.

FINDING 2: LIVING WITH OTHERS IS A KEY PREDICTOR OF SHELTER USE

The survey provides extensive information to characterize the living arrangements of the two samples of families. Living with others, especially when the other people are not one's parents, clearly increases the risks that a family will seek City-supported emergency housing. This risk was especially great for those who were not primary tenants; that is, those who were living in someone else's apartment and not those who had others living with them.

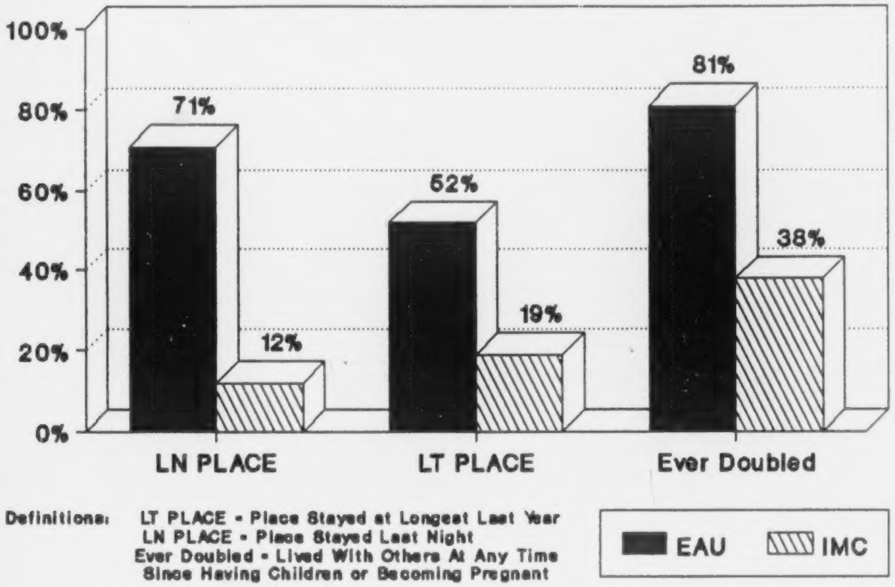
Among the shelter requester sample, 71 percent were living with others the evening before seeking emergency housing, 52 percent were doubled up at the place where they spent the most amount of time last year, and 81 percent had been doubled up for at least some period of time since the family was formed (see Figure 1). These incidences of living with others are much larger than those for the comparison sample of public assistance families. However, living with others also is not a rare event for the comparison sample: 12 percent were living with others at the time of the interview, 19 percent were doubled up at the place stayed at for the longest time period last year, and 38 percent had been doubled up for at least some period of time in the past.

An important finding from the survey is that 44 percent of the families using the emergency housing system were neither primary tenants last year, nor have they ever been primary tenants for a period of one year. Included in this 44 percent are fourteen percent of families that lived with the respondents' parents and thirty percent that lived with friends or other family members. Thus, almost half of the sample of homeless families have never been real participants in the housing market. For these families, homelessness is not a problem of losing an apartment, but a problem of never having found a place to live on their own. Even among the comparison sample, 12 percent of the families have never been long-term primary tenants.

In calculating the simple risk of seeking shelter for different types of families, we find that families who have been doubled up at any time in the past face a 6.8 percent risk of seeking City-supported emergency housing compared to a risk of just 1.0 percent for public assistance families that have never been doubled up (see Table 4). The risk of seeking emergency housing is 15.4 percent for families which spent the largest part of the previous year doubled up with anybody other than a parent.

The highest risk of seeking shelter is faced by families which once had their own place to live, but lost this apartment

Percentage of Families Living w/Others
in "Doubled-up" Arrangements
EAU vs. IMC



Definitions:
LT PLACE = Place Stayed at Longest Last Year
LN PLACE = Place Stayed Last Night
Ever Doubled = Lived With Others At Any Time Since Having Children or Becoming Pregnant

for one reason or another. These families have a 19.7 percent risk of seeking shelter. Thus, two important precursors of homelessness seem to be (1) movement from a stable housing environment to a doubled up situation and (2) living with other individuals who are not the parents of the head of the family. Both of these precursors, one a transition event and one an ongoing situational factor, should be able to be measured by HRA and used as targeting factors.

Is there a direct link between being doubled up (that is, not being the primary tenant) and seeking shelter? Or, is it the case that families which are doubled up have other characteristics that differ from families which are primary tenants, and that these related characteristics are resulting in increased risk of homelessness? If the latter is the case, then being doubled up does not directly affect homelessness, but rather acts as a proxy for other factors.

The multiple regression analysis explores these questions and indicates that variables measuring living arrangement have direct effects on the likelihood of seeking shelter even when other factors are held constant (see Table 18 for the multiple regression results). The coefficients for the variables measuring living arrangement just prior to the interview and the variable measuring whether a family had ever been doubled up are significantly different from zero in the multiple regression model. This indicates that even after statistically adjusting for differences in other factors across the sample, the situation of living with others currently or in the past has an impact on the probability of homelessness.

The marginal impacts of each of these living arrangement variables on the probability of homelessness are somewhat smaller in magnitude in the multiple regression models than in the descriptive, unadjusted statistics, but this is due to the fact that the various housing characteristic variables are intercorrelated. In particular, the variables measuring eviction, doubled up status in past, current living arrangements, number of residential moves in the past year, and previous shelter use all are somewhat correlated, as would be expected.

In considering these varied housing histories, especially in regard to having been a primary tenant, we conclude that their are several types of homeless families. Their paths to homelessness and the policies necessary to reduce their risk are distinct. For those who were primary tenants for the longest time last year, there is the potential of providing an intervention which will stabilize them in these homes. As an example, for those who were evicted or lost their apartment due to rent problems, the solutions to homelessness may lie in housing court. For those who have never been primary tenants, the solutions must necessarily be different. For those living with parents, one might be able to provide resources which would stabilize them in their parents' homes. It is important to consider the distinct needs of these diverse groups.

Table 4
Living Arrangements and Risk of Homelessness

	Risk of Requesting Shelter
Have Been Doubled Up Living With Others At Some Time Since Having Children	6.8%
Have Never Been Doubled Up	1.0%
Primary Tenants At Place Stayed Longest Last Year	1.5%
Once Were Primary Tenants But Not At Place Stayed Longest Last Year	19.7%
Never Have Been Primary Tenants:	
Stayed With Parents For Longest Period Last Year	7.5%
Stayed With Others For Longest Period Last Year	15.4%

Note: These sets of probabilities each differ significantly from one another at the 99% confidence level using a chi square test.

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration

FINDING 3: PREVIOUS SHELTER USE INCREASES THE RISK OF REPEAT USE

A previous episode of shelter use was a common characteristic of the sample of families that were requesting shelter when we conducted the interviews. Among the EAU sample, 31 percent were previous users while just 7 percent of the comparison sample of housed families had used shelters at some point in the past (see Table 5).

The high repeat use rate is particularly striking given that we only interviewed families at the EAUs if they had not been in a shelter during the previous thirty days. Comprising the 31 percent of previous shelter users were 10 percent of families which had used a shelter between 31 days and three months prior to the interview, 13 percent that had used shelters within the past year but not within the past three months, and 8 percent that had used shelters more than one year in the past.

The greater incidence of previous shelter use among the EAU sample relative to the comparison sample translates to a high risk of homelessness among the subsample of repeat users. Previous users have a risk of using shelters again of 12.4 percent compared to a risk of 2.5 percent for other families (see Table 6). Thus, being a previous shelter user increases a family's probability of shelter use by 9.9 percentage points.

Is this relationship between previous use and current use a direct relationship? Or, is previous shelter use just a proxy for other risk factors? The multiple regression analysis suggests that the prior shelter use variable is in part a proxy for the other risk factors in that the estimate of increased risk shrinks somewhat as other variables are statistically controlled for in the model. After adjusting for the effects of all other variables in the complete model reported in Table 18, we find that previous shelter use increases risk by 4 percentage points.

However, our modeling also indicates that if we consider the impacts of housing instability (e.g., frequent moves and being doubled up) in the period following an incident of shelter use to be associated with the shelter use episode, then the total (direct and indirect) impacts of previous shelter use on repeat use are 6.1 percentage points.

It is interesting, as a sidebar, to highlight the finding that seven percent of the general public assistance population that we interviewed report some previous use of the City's emergency housing system. This is a statistic that has not been readily available due to the infrequency of systematic surveys among the public assistance population. This statistic provides some framework for assessing the dimensions of the homelessness problem.

FINDING 4: EVICTIONS ARE AN IMPORTANT CORRELATE OF SHELTER USE FOR PRIMARY TENANTS

The survey information we collected measures self-reported and self-defined evictions. It is not possible to make judgments about how many formal, court-related evictions took place among our sample. Rather, we have measures that reflect the respondents' own assessments of whether they left a place due to eviction.

In analyzing the data, we distinguish between evictions due to failure to pay rent and evictions for other reasons. In addition, we measure, as a separate category, how often families left an apartment because they could not pay rent or because they reported being harassed by the landlord. Our measures of the frequency of evictions also do not include instances when a family is living with a second family which gets evicted.

Among the sample of families seeking emergency housing, 28 percent report that they have been evicted at some time in the past. In contrast, just 7 percent of the comparison families report eviction at some point in the past (see Figure 2). This translates to a risk of requesting shelter of 10.2 percent among those who have been evicted compared to a risk of just 2.8 percent for families that were never evicted (see Table 7).

The frequency of evictions is perhaps measured in a more meaningful way by focusing only on families that have been primary tenants at some point in the past. Among the 55 percent of shelter requesters who once had been primary tenants, 32 percent left the place where they had been primary tenants due to eviction. Another nine percent of these families left their last own apartment due to inability to pay rent or due to landlord harassment.

One other relevant measure of eviction is the frequency of eviction as the cause for leaving the place stayed the night before seeking shelter. As reported above, for the complete sample, the eviction rate was relatively low (16 percent). However, for the 18 percent of the shelter requesters who had been primary tenants the night before seeking shelter, evictions accounted for 48 percent of the reason for becoming homeless.

What does one conclude concerning the importance of evictions as an explanation for homelessness? Our data indicate that eviction does not explain a large share of the incidence of homelessness because 45 percent of the homeless families never had a place to be evicted from. However, eviction does account for 32 percent of the reasons for leaving apartments for former

Table 5

Previous Shelter Use

	EAU	IMC
Never Used Shelter in Past	69%	93%
Last Used: Within 3 Months	10%	2%
3-6 Months	7%	1%
7-12 Months	6%	0%
More than 1 Year Ago	4%	2%
More than 2 Years Ago	1%	0%
Three or More Years Ago	3%	2%

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Table 6
Previous Shelter Use and Risk of Homelessness

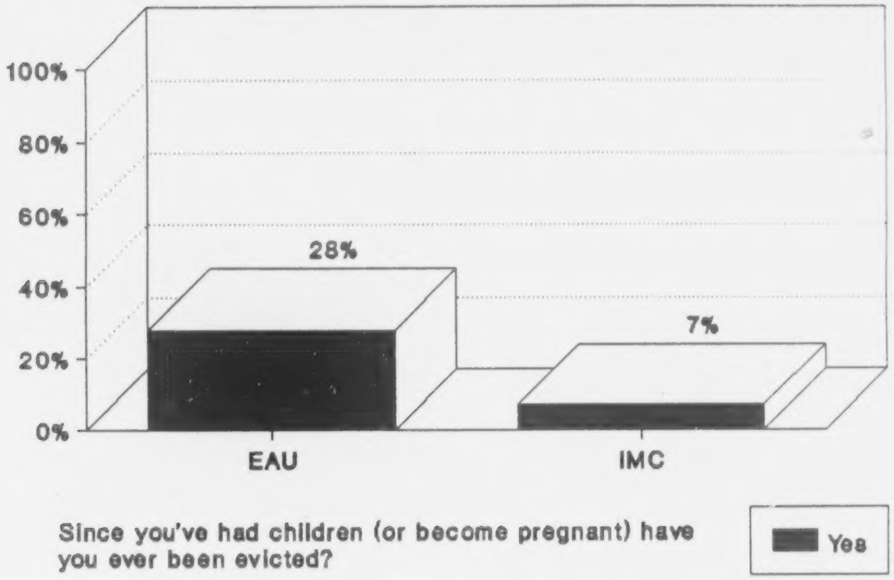
	Risk of Requesting Shelter
Previous Shelter Use	12.4%
No Prior Use Of Shelters	2.5%

Note: These sets of probabilities each differ significantly from one another at the 99% confidence level using chi square tests.

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration

primary tenants. Thus, eviction is a very important predictor of homelessness for the subsample of former primary tenants but not for the subsample that has never had their own place to live.

Percentage of Families Ever Evicted
EAU vs. IMC



Since you've had children (or become pregnant) have you ever been evicted?

Table 7

Eviction and Risk of Homelessness

	Risk of Requesting Shelter
Ever Evicted	10.2%
Never Evicted	2.8%

Note: These sets of probabilities differ significantly from one another at the 99% confidence level using a chi square test.

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration

FINDING 5: PREGNANCY AND RECENT BIRTHS CONTRIBUTE TO A FAMILY'S RISK OF NEEDING EMERGENCY SHELTER

Pregnancy and recent childbearing may be among the most salient issues in understanding current utilization of New York City's family shelters. Current pregnancies and recent births exhibit a strong relationship to entry into the shelter system. In contrast, teen motherhood has only a small impact on risk of homelessness.

Among those who were homeless, 35 percent indicated that they were pregnant at the time of the interview, as compared with six percent of those who were housed (see Table 8). Similarly, 26 percent of the homeless stated that they had given birth in the past year as compared with 11 percent of those who were housed. It is estimated that pregnant women on AFDC have an 18 percent probability of becoming homeless, as compared with 2 percent of those who are not pregnant. For those who gave birth in the past year, the probability of becoming homeless is eight percent.

Overall, almost one-third of the women interviewed had been teen mothers; this is substantially less than national estimates of the percentage of AFDC recipients who had been teen mothers, which are as high as 60 percent. Homeless mothers were more likely to indicate that they had given birth before age 18 than their housed counterparts. Those who had been teen mothers are estimated to have a five percent chance of becoming homeless, as compared to less than three percent for those who had delayed childbearing; this difference is statistically significant.

When pregnancy, recent births, and teen motherhood are examined in a multivariate model with other factors, the effects of pregnancy on risk of homelessness remains strong. For those women who are pregnant, the risk of needing emergency housing is a startling 10 percentage points greater than for those who are not pregnant. However, in the multivariate analyses, recent births and, especially, teen motherhood diminish in size and significance.

Clearly, there is a dramatic relationship between childbearing and requests for emergency housing. However, the exact nature of this relationship remains unclear. As a result of judicial decisions and state policies, New York City's emergency housing policy at the time of this study favored pregnant women and those with infants.[1] Pregnant women and new mothers had to be placed in private rooms; that is, they could not be placed in congregate facilities where many families sleep in one large area. Also, pregnant women and new mothers were eligible for assistance in finding permanent housing at an earlier point than other homeless women. Some argue that these policies provided greater incentive (or, at least, reduced some of the disincentive) for pregnant women and new mothers to enter emergency housing.

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[1] Such policies are currently in flux and some of the extra services described in this paper are no longer targeted to pregnant women and new mothers.

Within this framework, pregnant women living in difficult housing situations (e.g., crowded or doubled up families) perhaps were more likely to leave these situations for emergency housing knowing that they would not be placed in a congregate facility. Further study is necessary to determine if changes in policy have resulted in a different mix of families requesting shelter. However, it is noteworthy that our analyses also indicate that pregnancy and recent births seem to be highly related to housing instability, not just to shelter requests. This would indicate that pregnancies are related to the actual housing situation and not just to the decision to seek emergency shelter.

Another possible explanation for the differences between the housed and homeless populations in terms of pregnancy and childbirth focuses on the strains placed on the family unit by these experiences. Difficult housing situations, which are typical for the poor in New York City's limited low income rental market, are made even more untenable by pregnancy or the presence of a newborn child. This scenario is especially noteworthy since relatively few of these women have ever been primary tenants in an individual household.

It is also possible that pregnancy or new motherhood is not actually the precipitant of homelessness so much as it is a correlate of a range of characteristics associated with families on the verge of becoming homeless. That is, perhaps one does not lead to the other; rather, pregnancy may simply be more likely for women experiencing a range of problems and conditions typical of the "pre-emergency housing period." Further analyses may help clarify this relationship. However, it is worth stressing that in regard to a broad range of factors the pregnant and new mothers do not look terribly different than other homeless women.

Although teen motherhood is more common among the homeless sample, it does not maintain significance when examined with other factors. It is likely that teen motherhood is one of a constellation of factors, all intercorrelated, that increases a family's risk of needing emergency housing.

Table 8
Pregnancy and Recent Births Among Shelter Requestors and General Public Assistance Families

	EAU	IMC	Risk of Requesting Shelter
Pregnant At Time Of Interview	34.5%	5.5%	17.7%
Not Pregnant	65.5%	94.5%	2.3%
Had A Baby Within Past Year	26.0%	10.7%	7.7%
No New Child	74.0%	89.3%	2.8%
Had A Child Before Age 18	36.8%	23.7%	5.0%
Did Not Have Children Before Age 18	63.2%	76.3%	2.8%

Note: These sets of probabilities each differ significantly from one another at the 99% confidence level using a chi square test.

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration

FINDING 6: DISRUPTIVE EXPERIENCES ELEVATE THE LIKELIHOOD OF HOMELESSNESS

Heads of household in families requesting shelter were more likely than their counterparts in housed families to have been abused and to have experienced a variety of other disruptive events as both children and adults. Tables 9 and 10 present frequencies for events that occurred during childhood and adulthood (e.g. being battered by a spouse or boyfriend). Each of the nine events characterized at least 10% of the shelter requesters and each differentiated between families seeking shelter and those in the public assistance caseload. Battering by a spouse or boyfriend, which was reported by 25% of shelter requesters and 16% of housed families was most common for both groups.

Nearly a third (32%) of the EAU sample had experienced at least one childhood event compared with about a seventh (14%) of the IMC sample; adult events affected 45% the EAU sample and 20% of the IMC group. Differences between the groups were larger for younger respondents and diminished somewhat with age.

Each of the early disruptive experiences is a good predictor of homelessness, and multiple experiences are very strong predictors of homelessness. For example, families whose head had three or more childhood or adult disruptive experiences have a 15.6 percent chance of homelessness compared to 2.8 percent for other families (see Table 11). One or more early childhood experiences results in a 7.6 percent chance of homelessness. Adult disruptive experiences also dramatically increase the risk of homelessness. Having two or more of these adult experiences results in an 11.2 percent risk of homelessness. In some cases, these experiences are direct antecedents of homelessness.

The multiple regression analysis indicates that the disruption variable affects risk of homelessness even after adjusting for other causal factors. Holding constant other factors, having three or more disruptive experiences increases the risk of shelter request by 9.0 percentage points.

As mentioned earlier, 26 percent of the shelter requesters reported at least one incident of battering by a spouse or boyfriend at some point in the past. A far smaller percentage, however, cite battering as the direct reason for shelter use. For example, 2.6 percent left the place they stayed the night before the survey because of battering. Similarly, 3.7 percent left the place they stayed at the longest last year due to a battering incident.

Table 9

Early Disruptive Experiences Before Age 18: EAU Sample Relative to IMC Sample

	EAU	IMC
Lived In Foster Home	10%	3%
Lived In An Institution Or Group Home	10%	2%
Ran Away For A Week Or More	21%	6%
Lived On The Street	11%	2%
Physical Abuse	11%	7%
Sexual Abuse	10%	4%

Note: Categories are not mutually exclusive. An individual may have had none, one or more than one of these experiences.

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Table 10

Adult Disruptive Experiences: EAU Sample Relative to IMC Sample

	EAU	IMC
Told to Leave by Parents Last Year	15%	1%
Stopped Living with Boyfriend Last Y	15%	4%
Abused as an Adult	26%	16%

Note: Categories are not mutually exclusive. An individual may have had none, one more than one of these experiences.

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Table 11
Disruptive Experiences and Risk of Homelessness

	Risk of Requesting Shelter:
Three or More Adult or Child Disruptive Experiences	15.6%
All Others	2.8%
One or More Childhood Experiences	7.6%
Two or More Childhood Experiences	11.9%
One or More Adult Experiences	7.0%
Two or More Adult Experiences	11.2%

Note: These sets of probabilities each differ significantly from one another at the 99% confidence level using chi square tests.

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration

FINDING 7: FEW REPORT SUBSTANCE ABUSE, BUT THOSE WHO REPORTED PROBLEMS ARE AT ELEVATED RISK

The information collected in this study gives a limited view of the impacts of drug use and alcohol use on risks of requiring emergency housing. The data are self reported, and almost surely represent underestimates of the incidence of drug use. The survey asked: "Has use of drugs or alcohol affected your ability to do the things you have to do at any time in the last six months?" Additionally, we asked: "Has use of drugs or alcohol by a friend or relative affected your ability to work, or do the things you have to do any time in the last six months?"

Our findings indicate that self-reported substance abuse problems are relatively rare in both the EAU and IMC samples. Just 5 percent of the EAU families and 1 percent of the IMC families reported substance abuse that affected their functioning during the previous six months (see Table 12). And, 12 percent of the EAU respondents and 6 percent of the IMC respondents reported disruptive substance abuse use either by themselves, families or friends within the past six months.

Although substance abuse is not reported with great frequency, we do find that families that report substance abuse problems, either within the immediate family or among close friends and relatives, are at high risk of becoming homeless. The substance abuse subsample has a 12.7 percent risk of requesting shelter compared to 3.2 percent for the rest of the sample.

Another substance abuse variable which may be measured more reliably is use of detox programs. Eight percent of the EAU sample, compared to two percent of the comparison sample, report having been in a detox program for drugs or alcohol at some point in the past.

Of note, the impact of experience with detox programs on risk of homelessness remains large even in the multivariate analysis that controls for other correlates of homelessness. In contrast, the substance abuse variables do not remain significant in the multivariate model. In particular, substance abuse is correlated with detox, and loses significance when this variable is entered into the regression model.

Table 12
Substance Abuse and Risk of Homelessness

	EAU	IMC	Risk of Requesting Shelter
Reported Problem With Personal Substance Abuse	4.8%	1.1%	12.7%
No Reported Problem	95.2%	98.9%	3.2%
Reported Problem With Personal Substance Abuse Or With Abuse Among Close Friends Or Family	11.6%	5.5%	6.8%
No Reported Problem	88.4%	94.5%	3.1%
Has Ever Participated In A Detoxification Treatment Or Program For Drugs Or Alcohol	8.2%	1.9%	12.9%
Has Never Been A Detoxification Participant	91.8%	98.1%	3.1%

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration

FINDING 8: HOMELESS FAMILIES ARE MUCH YOUNGER ON AVERAGE THAN HOUSED PUBLIC ASSISTANCE FAMILIES

The sample of EAU families included many more families which had household heads younger than 30 years old and younger than 25 years old relative to the comparison sample of public assistance families. Seventy three percent of the homeless families have household heads who were younger than 30 years old compared to just thirty nine percent of the comparison families. The percent of respondents under 25 years old was 44 percent in the EAU sample compared to just 18 percent in the housed sample (see Table 1).

These findings clearly indicate that age is an important factor in understanding which families are at high risk of requesting shelter use. However, it also is important to understand why age seems to affect the risk of homelessness. Our multiple regression analysis and an assessment of relative characteristics of subsamples defined by age provide important explanations of the dynamics that lead age to be correlated with shelter use. First, the descriptive statistics of Table 13 indicate that young respondents (30 years or under) are much more likely to be characterized by the array of risk factors described in earlier findings. For example, families with household heads under 30 are much more likely to have been previous shelter users, had multiple disruptive experiences, been pregnant at the time of the interview, had a baby within the past year, have moved more than once in the past year, and not been a primary tenant.

The multiple regression analysis indicates that it is this list of risk factors that has direct effects on the risk of shelter use. The age variable is not significant in the regression equation because age does not directly affect shelter use but rather age affects most of the other predictors of homelessness.

Given the distribution of risk factors across age groups, age must be seriously considered in trying to address the problem of homelessness. We need to better understand why families headed by the young are more likely to experience these key risk factors, and what can be done to neutralize the impacts of these risk factors on shelter use. We also need to learn if the young "at risk" subgroup will face lower risks of shelter use as they become older, or whether the current cohort of young parents will continue to have higher risks of shelter use as they age. Finally, we need to assess whether future cohorts of young parents will have high risks of homelessness or whether the current cohort is unusual for one reason or another.

Table 13

Characteristics of the Population by Age

	Sample Distribution			
	EAU		IMC	
	< 30 Yrs (n=507)	> 30 Yrs (n=197)	< 30 Yrs (n=202)	> 30 Yrs (n=322)
Housing:				
Primary Tenant Last Year	29%	57%**	74%	93%*
Once Primary Tenant	19%	20%	5%	2%*
Never Primary Tenant:				
Stayed with Parents Last Year	19%	3%**	13%	2%**
Stayed with Others Last Year	33%	19%**	9%	3%**
More Than 2 Moves Within Past Year	33%	27%	6%	4%
Parenting:				
Pregnant	39%	24%**	11%	2%**
Had a Baby Within Past Year	31%	13%**	18%	6%**
Had a Child Before Age 18	41%	26%**	29%	20%**
Health, Mental Health and Substance Abuse:				
Health Problem Last Year	14%	26%**	9%	32%**
Nervous Problem Last Year	9%	14%*	6%	22%**
Overnight Mental Hospital	4%	6%	0%	2%
Substance Abuse Problem	4%	7%	1%	2%
Ever Detox Patient	6%	13%**	2%	2%
Welfare and Social Supports:				
Parents on Public Assistance	57%	39%**	49%	20%**
3 or More Social Disruptions	22%	9%**	5%	2%*
Prior Shelter Use	33%	28%	9%	7%

* p<.1 for chi square test of significance for differences in percentages across sample.
** p<.05 for chi square test of significance for differences in percentages across samples.

FINDING 9: BLACK FAMILIES ARE MORE LIKELY TO SEEK EMERGENCY HOUSING THAN OTHER FAMILIES

The finding that blacks are more likely to request emergency housing than whites is very analogous to the findings for the age variable. We find that 54 percent of the shelter requesters are black even though just 31.9 percent of the sample of public assistance families is black (Table 1). These statistics indicate that black families in the City are twice as likely (5.5 percent compared to 2.3 percent) as other families to become homeless. It is important to note that our comparison sample of public assistance families oversampled blacks; thus, the differences in shelter use for racial subgroups in the population are in fact larger than we estimate for our samples.

The multivariate analysis reported in Table 18 indicates that race in and of itself does not seem to affect the likelihood of homelessness but rather race acts as an important proxy for other risk factors. Blacks are at elevated risk of needing emergency housing because the key risk factors predicting homelessness are more prevalent among blacks than non-blacks (as shown in Table 1, most of the non-black sample is Hispanic). Table 14 indicates that black families, relative to other families, are more likely to have been previous shelter users, to have been pregnant at the time of the survey, and to have had a baby within the past year.

Race is an important predictor of shelter use, even though it does not have a direct effect on risk of homelessness. We find that risk factors are not distributed evenly across races, and that black families in New York have unusually high prevalences of some of the key risk factors predicting shelter use. This must be considered in policy decisions. However, it should be emphasized that not all black families on public assistance are at high risk of becoming homeless, and the risk factors we identify in this report can be used to predict which families are at risk regardless of race.

Table 14

Characteristics of the Population by Race

	Sample Distribution			
	EAU		IMC	
	Black (n=377)	Other (n=327)	Black (n=167)	Other (n=357)
Housing:				
Primary Tenant Last Year	37%	38%	78%	89%*
Once Primary Tenant	18%	20%	4%	2%
Never Primary Tenant:				
Stayed with Parents Last Year	16%	13%	12%	3%**
Stayed with Others Last Year	29%	29%	7%	5%
More Than 2 Moves Within Past Year	34%	28%	5%	5%
Parenting:				
Pregnant	38%	31%**	6%	5%
Had a Baby Within Past Year	27%	25%	15%	9%**
Had a Child Before Age 18	36%	37%	29%	21%**
Health, Mental Health and Substance Abuse:				
Health Problem Last Year	15%	21%**	19%	25%
Nervous Problem Last Year	9%	12%	5%	21%**
Overnight Mental Hospital	3%	5%	1%	1%
Substance Abuse Problem	5%	5%	1%	1%
Ever Detox Patient	7%	10%	1%	3%
Welfare and Social Supports:				
Parents on Public Assistance	56%	47%**	44%	25%**
3 or More Social Disruptions	17%	20%	3%	4%
Prior Shelter Use	33%	30%	13%	5%**

* p<.1 for chi square test of significance for differences in percentages across sample.

** p<.05 for chi square test of significance for differences in percentages across samples.

FINDING 10: ALTHOUGH ADMINISTRATIVE CLOSINGS ARE MORE COMMON AMONG SHELTER REQUESTERS, THEIR IMPACT ON HOMELESSNESS IS INDIRECT

In its preliminary work aimed at identifying families at high risk of homelessness, HRA noted that frequent administrative closings were an effective factor for distinguishing those in need of shelter from the general public assistance population. In this study, administrative closings -- that is a loss of benefits for failure to comply with administrative requirements such as mail surveys -- were found to be more common among those families requesting shelter than among those who are housed. Whereas, 26 percent of those housed had experienced two or more administrative closings over the life of the case, nearly half (49%) of those seeking shelter had experienced frequent closings (see Table 15). Those families with frequent closings have a 6.2 percent chance of becoming homeless, while for those with no closings the risk is 2.1 percent.

If we limit the analysis to the past two years, the importance of administrative closings seems to increase. Whereas one-third of those requesting shelter had experienced two or more administrative closings in the past two years, only 8 percent of those housed had had their case closed two or more times. Those who had experienced two or more administrative closings during the past two years had a 12.2 percent chance of becoming homeless; those whose case had not been closed, had a 1.9 percent chance of becoming homeless.

Taken at face value, this simple analysis might support the idea that HRA's closing of cases for administrative reasons contributes to the need for emergency housing. However, the multivariate analysis indicates that the relationship between closings and homelessness is not so clear or direct. The statistical significance of administrative closings fades when other factors are added to the model. Frequent closings are correlated with other factors which lead to housing instability and the need for emergency shelter. Rather than being directly tied to the need for shelter, administrative closings may merely be an indicator of other problems and needs in the household (i.e., a correlate of those disruptions that appear to be tied to homelessness) or closings may have an indirect effect on homelessness by contributing to the kinds of instabilities (e.g., frequent moves) which themselves lead to the need for shelter.

Table 15
Administrative Closings and Risk of Homelessness

	EAU	IMC	Risk of Requesting Shelter
Within Entire Public Assistance History:			
Two or More Administrative Closings	49.3%	25.8%	6.2%
One Administrative Closing	64.9%	44.5%	4.8%
No Administrative Closings	35.1%	55.5%	2.1%
Within The Past Two Years:			
Two or More Administrative Closings	33.2%	8.2%	12.2%
One Administrative Closing	56.5%	23.5%	7.7%
No Administrative Closings	43.5%	76.5%	1.9%

Note: These sets of probabilities each differ significantly from one another at the 99% confidence level using chi square tests.

Source: Health Research Program tabulations from HRA adminitrative data files, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

FINDING 11: THE LENGTH OF A SHELTER STAY IS VERY DEPENDENT ON THE SIZE OF THE FAMILY

Although the focus of our analysis has been on factors that predict entry into a shelter, we also have conducted some analysis of the determinants of length of stay at a shelter for the EAU sample. The most significant predictors of length of stay are the number of adults in the family (one or two) and the number of children in the family.

Families with two adults stay 41 nights longer than families with one adult holding other factors constant. This represents a 78% increase in length of stay. Table 16 presents the expected stay (adjusting for other factors) for families that include different numbers of children. A family with three children has an expected stay of 40 days compared to an expected stay of 14 days for pregnant women with no children and 23 days for families with one child (it is important to note that these are expected medians rather than means, which accounts for the relative short expected values). Thus, families with three children have an expected stay that is more than three times longer than shelter users with no children.

The length of stay analysis also indicates that families which had two or more moves the year before entering a shelter have shorter stays than families which had been less mobile. Blacks also seem to have shorter stays than Hispanics, and those with fewer years of education have longer stays than others.

Table 17 presents the estimated baseline hazards for leaving shelter for the EAU respondent with average sample characteristics. As would be expected, the likelihood of leaving the shelter during a given time interval decreases markedly the longer a family stays at a shelter. A family has a 10 percent chance of leaving the shelter during the first week of an episode. However, for families that stay three weeks, the likelihood of leaving during the fourth week falls to just .06.

TABLE 16

Median Shelter Durations for Families with Varying Numbers of Children

Number of Children	Expected Median Duration
0	14
1	23
2	28
3	40
4+	33

NOTE: These estimates are for a family with all risk factors equal to sample mean for EAU families. The estimates are based on a multivariate hazard analysis.

Source: Data from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration. These tabulations were prepared as part of a report titled, "The Duration of Stays in Shelter" by Tony Lancaster.

IV. FIVE POSSIBLE MISCONCEPTIONS CLARIFIED BY THE STUDY

In addition to the many risk factors that the study has identified as correlates of homelessness, an even larger number of factors were found to not differ significantly across the EAU and IMC samples. The survey data represent a useful source of information to "debunk" many stereotypes or misconceptions concerning users of emergency housing. In this section, we identify five key factors that are less important than is often thought in explaining homelessness.

Mental Illness

Assessing mental illness with self-reported data is a difficult task. In our survey, we asked the respondents: "Did you have a nervous problem in the last year that has affected your ability to do the things you had to do for a period of at least one month?" It turns out that more of the comparison sample reported nervous problems than the homeless families (16 percent vs 10 percent). When these percentages are age adjusted, however, the two samples have comparable incidences of self-reported nervous problems.

We also asked respondents if they had ever spent one or more nights in a mental hospital. Such admissions were very rare with just 4.8 percent of the homeless families reporting a stay and just 1.1 percent of the comparison sample. Although these events are rare, the families of respondents who did spend time in a mental hospital had a very high, 12.7 percent risk of homelessness compared to just a 3.2 percent risk for the rest of the sample.

Health Factors

The survey asked a series of questions about health problems among parents and children in the family. After age adjustment, none of the health variables proved to be significant risk factors.

The only potentially significant finding among the health questions was that previous shelter users reported greater incidence of health problems than others in the sample. This was true of both the EAU and IMC samples. Among those currently seeking shelter, 21 percent of the previous shelter users and 16 percent of those new to the emergency housing system reported a health problem. The differences between the new families and repeat shelter users are greatest for the youngest respondents.

TABLE 17

Estimated Baseline Hazard for Leaving Shelter

Time Interval (in nights)	Baseline Hazard (Likelihood of Leaving)
1-7	.10
7-14	.09
14-21	.08
21-28	.06
28-60	.04
60-180	.03
GE180	.01

NOTE: Estimates based on a multivariate hazard analysis.

Source: Data from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration. These tabulations were prepared as part of a report titled, "The Duration of Stays in Shelter" by Tony Lancaster.

Job History

Prior work experience does little to protect a public assistance family from homelessness. The homeless parents were somewhat less likely to have worked full-time for a year or more than their housed counterparts (33 percent vs 40 percent). However, these differences diminish almost completely after adjusting for the age differences of the two samples with the exception of the respondents who are 41 or more years older.

Interestingly, among those respondents who had worked full-time at some point in the past, the time since this full-time employment was shorter for EAU respondents than for IMC respondents. Sixty one percent of the shelter requesters who had once had a full-time job had been away from this for less than two years. The comparable percentage for comparison families is just 26 percent. This difference in time since full-time employment holds up for each age group.

Educational Attainment

Lack of educational attainment also is not a predictor of homelessness. For both samples, the average level of educational attainment is poor. Sixty percent of the EAU sample and sixty three percent of the IMC sample stated that they had completed fewer than twelve years of schooling.

Within both the shelter requester and the comparison samples, Hispanics average fewer years of schooling than do blacks. Among Hispanic respondents, 18 percent of those in the EAUs and 33 percent of those in the IMCs had completed eight or fewer years of school. In contrast, only 3 percent of the blacks interviewed in the EAUs and 5 percent in the IMCs had such limited formal education. However, in none of the racial/ethnic subgroups explored was educational attainment a strong indicator of risk of homelessness.

Social Ties

Surprisingly, more respondents seeking shelter (93 percent) than respondents from the IMCs (86 percent) reported that they had a mother or grandmother living, another close relative, or a close friend. The EAU sample also reported having seen their social contacts more recently. For example, 70 percent, compared with 58 percent in the IMC sample, had seen either their mother or their grandmother within the last month.

These patterns reversed themselves, however, when respondents were asked whether the various members of their social network had room for the respondent and her children to live there. Respondents from the IMCs were twice as likely as those from the EAUs to report that someone had room (23 percent vs. 10 percent). The difference favoring the IMC sample was strongest for the question about whether the social contact would allow the respondent to live there now, if asked. Only 4 percent of the EAU sample, compared with 18 percent of the IMC sample answered affirmatively.

The survey information suggests that a problem for the shelter requester sample is that they had already worn out their welcome at the apartments of social ties. Many more EAU families had spent some time in the past at apartments of family members and friends, and had already been asked to leave. Among the subsample of families that had been doubled up, a much higher percentage report not having the option of staying with families and friends currently. Of 106 EAU respondents asked to leave by parents within the past year, only one said her mother or grandmother would take in her family now.

Thus, the data suggest that a lack of social ties is not an explanation for shelter use. Rather, the housing and social problems facing potential shelter users leads to a period of reliance on friends and relatives, and shelter use occurs when these informal networks wear down. This finding is consistent with the first finding reported that indicates that shelter use is clearly a "last option" pursued by many of the families that request emergency housing.

V. FORECASTING WITH SURVEY AND ADMINISTRATIVE DATA

Introduction and Methodology

The data set assembled for this project represents useful information for better understanding characteristics of people using the City shelter system compared to other public assistance families. However, HRA had a much more specific reason for sponsoring this project; the agency recognized the importance of being able to identify at a given point in time which families in the public assistance population are at high risk of becoming homeless in the future. If a subset of high risk families can be targeted, it is much more feasible to develop cost-effective preventive service initiatives to head off episodes of homelessness.

In order to identify a high risk target group, it is necessary to take the data described in the above sections of this report and to develop a statistical forecasting model. This forecasting model can be used to estimate the risk of homelessness for each public assistance family depending on the precise characteristics of the family. Target groups can be formed in various ways based on the forecasting model and the specific preventive service initiative under consideration. However, a high risk target group generally is formed by including families that have a forecasted risk of homelessness above some critical level. The higher the critical cut-off, the smaller the target group will be.

The details concerning the forecasting analysis conducted as part of this project are presented in volume 3 of this final report. In this section, we summarize the methods used and the findings of the analysis. In addition, we discuss how the forecasting model can be used to target families at high risk of becoming homeless.

The forecasting model that we have developed uses variables from the survey of families completed as part of the project and from administrative records. Complete data are available for 1,097 families from the total sample of 1,228 families because it was not possible to match administrative and survey data for 131 families.

The data set included far more distinct variables than could be considered in any single forecasting analysis. Starting with thirty-five different variables that we judged to be possible predictors of shelter use, we systematically explored this list of variables in various combinations and eliminated factors that consistently did not explain differences in risk of homelessness.

In the final version of the model that is reported here as the "complete" model, there are 20 different predictor variables. The dependent variable is equal to zero if a family is in the comparison sample and equal to one if a family is in the shelter requester sample.

The statistical parameters of the model are estimated using weighted least squares multiple regression analysis. We also have conducted our analyses using an alternative statistical estimation procedure called logistic regression analysis. The logistic model and the least squares model specify different underlying functional forms for the statistical relationships among variables. Both approaches result in what are termed "consistent" estimators of the parameters of the forecasting models. We report weighted least squares findings here because the interpretation of the least squares parameters is more straightforward, and we found virtually no differences in the actual forecast results using the two different statistical approaches.

The forecasting models are estimated using a weighting procedure to adjust for the fact that we oversampled shelter requesters in our survey. Whereas in a simple random sample just 3.33 percent of respondents would be expected to request shelters during a given year, our choice-based sample was constructed so that more families in the sample are shelter requesters than non-requesters. This sampling strategy greatly increases the power of the statistical analysis, and weighting is a standard procedure that allows one to translate the model parameters into coefficients that reflect increments in the risk of homelessness for subsamples of families with different characteristics.

The Estimated Forecasting Model

Table 18 presents the statistical estimates of the parameters of the forecasting model. The first column presents the findings for the complete model that includes both administrative data and survey data. The twenty variables in the model explain 15 percent of the variance in the dependent variable. The individual coefficients reported in the table suggest which variables are the most important risk factors for use of the emergency housing system; the estimates are consistent with the discussion of the last section.

The two factors that lead to the highest increments in risk of shelter use are the previous primary tenant factor (i.e., the situation when a family once was a primary tenant but not at the place they stayed the longest last year) and "current pregnancy". Each of these two factors increase a family's risk of being a

TABLE 18

Predictors of Homelessness: Weighted Least Squares Model for Full Sample

Variables	Complete Model	Admin Data Model	Survey Data Model	"Easy" Data Model
Previous Primary Tenant	0.10 *	----	0.11 *	----
Stayed with Parents	0.02	----	0.01	----
Stayed with Others	0.08 *	----	0.07 *	----
Two Moves	0.06 *	0.12 *	0.06 *	----
Ever Evicted	0.04 ***	----	0.04	----
Ever Doubled	0.02	----	0.02	----
Prior Shelter	0.04 **	0.07 *	0.04 **	0.08 **
Ever Detox	0.08 **	----	0.09 **	0.09 *
Ever SSC	0.02	0.04 **	0.05	0.03 *
Disruptions	0.09 *	----	0.09 *	----
Current Pregnancy	0.10 *	----	0.11 *	0.12 *
Baby Past Year	0.03	----	0.03	0.04 **
Age (linear)	-0.0004	----	-0.004	-0.001 **
Hispanic	-0.01	----	-0.02	----
White/other	-0.02	----	-0.02	----
Freq Close	0.01	0.03 *	----	----
Bonus Adm	-0.01	-0.02	----	-0.02
Recoupad	0.01	0.003	----	-0.004
Foster	----	----	----	0.04
Institution	----	----	----	0.05
Constant	0.01 **	0.01 **	0.01	0.05 **
R	0.14	0.07	0.14	0.09

* p < .01
** p < .05
*** P < .10

Note: All variable except for age are dichotomous. The numbers presented in this table are regression coefficients that measure the change in risk of homelessness for families having the characteristic compared to those who do not. The dependent variable equals one if a family requested shelter (EAU sample) and equals zero if a family was not a requester (IMC=1).

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

See Glossary for variable definitions.

shelter requester by 10 percentage points. Given that the average risk for members of the comparison group is just 3.33 percent, a 10 percentage point increment in risk is substantial.

Families which were doubled up with somebody other than their parents last year have an elevated risk of eight percentage points. Families headed by somebody who had been in a detox program at some time in the past also have an eight percentage point elevated risk. Families that have had two or more socially disruptive experiences in the past (see the Glossary and Finding 6 for a detailed description) have a nine percentage point elevated risk. It is important to note that these increments in risk are measured after adjusting for any other differences in characteristics across sample members.

Using the Forecasting Model to Target High Risk Families

Once estimated, the forecasting model can be used to target which families are at highest risk of becoming homeless. This is done by considering the predicting characteristics of each given family and calculating, using the parameters of the model, the forecasted probability or risk of using the shelter system for each family. A target group is formed by choosing some cut-off risk level, and deciding that families with a predicted risk above the cut-off level should be in the target group. Unless a forecasting model is perfectly accurate, any target group will include some families which are predicted to be at high risk but which would never actually use the shelter system. In addition, some future shelter users are likely to be misjudged by the forecast model and not end up in the target group. A key question in evaluating alternative forecasting models is the accuracy of the model in forming as small a target group as possible that includes a large portion of future homeless families. Accuracy can be judged in one of two ways:

* having to target as small a number of public assistance families as possible in order to have some specified percentage of all homeless families included in the target group (e.g., a model that identifies 5 percent of the public assistance population at high risk would be considered more accurate than a model that identifies 10 percent of the public assistance population at high risk, if both models in fact include 50 percent of all homeless families in the group targeted).

* having the highest possible percentage of all homeless families in a target group of a given size (e.g., if two models both target 3 percent of the public assistance population as high risk families, the model that includes 40 percent of all homeless families would be considered more accurate than a model that

TABLE 19

Percentage of PA Population That Must Be Targeted to Identify 50% of Homeless Families

Models:	
Admin. Only	13%
Easy to Obtain	9%
Complete Model	5%

*In some cases slightly more or less than 50% are targeted

Percentage of Homeless Families Identified When Target Group is 5% and 3% of PA Population by Model

	Percentage of PA Families Targeted	
	5%	3%
Admin. Only	35%	24%
Easy to Obtain	38%	30%
Complete Model	51%	42%

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

includes just 30 percent of all homeless families in the target group).

How accurate is the "complete model" discussed above? Table 19 presents the relevant statistics for assessing accuracy (the relevant findings for this discussion are those reported for the "complete" model). Using the first definition, it turns out that 5 percent of all public assistance families need to be targeted in order to have half of the families that will request emergency housing during a twelve month period included in the target group. A related statistic is that of all families in such a target group, 30 percent will be future homeless families (in the absence of some intervention).

Table 19 also demonstrates that when the target group is made smaller (for example, 3 percent of the public assistance family population), the percentage of all homeless families in the target group decreases (to 42 percent). However, the composition of the target group becomes more concentrated with homeless families as the target group becomes smaller. When the target group includes 3 percent of the public assistance population, 42 percent of the target group (compared to 30 percent in the case of the larger target group) are families that would be expected to become homeless over a 12 month period.

The choice of how large a target group to select will depend on the policy goals of HRA. As the target group increases in size, more high risk families will be found. However, services will have to be provided to substantially more families who would not have become homeless in the absence of these services.

Practical Considerations in the Design of a Forecasting Model

Tables 18 and 19 report further analysis which addresses an important practical concern in judging the accuracy of forecasting models. In general, models become more accurate as more variables are added to the forecasting equations. An important question, however, is whether the increased accuracy is substantial and worth the effort needed to collect a long list of data elements.

We explored this question by re-estimating the forecasting model with various subsets of the variables. We reformulated the model so that it just includes administrative data that would involve no new data collection, and then we reformulated the model again so that it just uses data elements that are relatively easy to collect. Some of the variables in the "easy" model would require new questioning of clients, but they are not sensitive questions and could be included in recertification interviews. We judged that just some of the administrative data variables are easy to use because a great deal of file manipulation is required to obtain variables such as residential moves and administrative closings.

Table 18 presents the estimated parameters of these smaller forecasting models, and Table 19 presents statistics that allow for comparisons of the accuracy of the smaller models and the complete model. Unfortunately, the smaller models do not perform nearly as well as the complete model. If 5 percent of the public assistance population is targeted using the administrative data model, just 35 percent of all homeless families are included in the target group compared to the 51 percent coverage found with the complete model. The model that uses the easy-to-obtain data performs just slightly better than the administrative data model.

Prior to the start of this project, HRA staff had explored the use of some simple forecasting approaches using two administrative data variables: two or more residential moves and two or more administrative closings. This forecasting model identified 42 percent of all homeless families when 12 percent of the public assistance population is targeted. A good judge of the improvement in forecasting capacity that results from this project's survey data is the finding in Table 19 that the "complete" model can identify the same percentage of homeless families as the two variable model, but the target group can be one quarter the size of the 12 percent group required with the simple model. In terms of actual numbers, this means that when we consider the entire public assistance population of approximately 230,000 families, the high risk target group could be reduced from approximately 28,000 public assistance families (when the simple model is used) to approximately 7,500 families (when the "complete" model is used) and in each case the number of homeless families in the target group would be approximately 4,200.

The final decision regarding the trade-off between ease of implementation and effectiveness at targeting those at risk must be made by officials at HRA. We believe that there is convincing evidence to suggest that with limited effort, a multivariate algorithm can be developed and implemented which would allow for more effective targeting and the possibility of preventive services. Although it is now better understand which factors have greatest predictive power, it is essential to balance predictive power of each variable with an assessment of the political and practical feasibility of using such factors for targeting.

VI. POLICY OPTIONS

Introduction

HRA is responsible for providing shelter despite the extreme limitations of New York City's low-income housing market. Managing this problem requires that HRA be able to effectively and efficiently target interventions that will ameliorate the effects of crowding, displacement, and inadequacy that accompany the current housing situation. Whereas other sections of this report provide in-depth discussion of the characteristics of homeless families as compared to their housed counterparts, and present in detail the results of the forecasting and targeting exercises, this discussion focuses on the policy options available to the agency, once forecasting and targeting have been undertaken. Recommendations are based on findings regarding both the composition of the homeless families population and those factors which place families at greatest risk of needing emergency housing.

Policy Implications of the Targeting Strategy

Although this project has demonstrated the technical feasibility of effectively targeting those public assistance families at greatest risk of becoming homeless, certain policy implications should be recognized in these targeting strategies. No targeting strategy will be 100 percent effective at identifying those at risk. As we demonstrate in this report's forecasting section, the "complete" model -- our best effort -- has the potential to identify half of those at risk of homelessness in a target pool which includes 5 percent of all public assistance families. Therefore, if the targeting method selected is only expected to identify half of those at risk, we must ask, "which half?" That is, are we systematically including some types of at-risk families within our target group, while systematically ignoring others? And, if so, what are the implications of this for providing effective interventions?

If, for example, those who have been evicted are less likely to be identified by the selected targeting method, it would be fruitless to focus the intervention program on eviction prevention. Similarly, if those who lost their residence due to building problems and crime have been excluded as a result of the targeting formula used, focusing attention on improved building maintenance will not result in reduced requests. If fewer primary residents are among those targeted, greater emphasis must be placed on the interventions effective among those who are doubled up. If more primary tenants are among those targeted, greater emphasis must be placed on stabilizing families in their existing residence.

Strategies for Prioritizing Among Those Targeted

Among those who have been included within the target group some attention must be paid to their priority for service. Given current resources, HRA may not be able to quickly reach even 5 percent of its caseload (approximately 12,000 families) with enhanced services. Therefore, who should be served first? Or to whom should greatest attention (or resources) be paid? What kinds of criteria can be used to make these decisions and by whom should these decisions be made?

One possible strategy is to focus on those at greatest risk. Such an emphasis has the benefit of greatest targeting efficiency. Such a policy may suffer, however, if the available interventions are too weak to address the needs of those at greatest risk. Extremely high risk families may inevitably enter shelter and the overall success of the program can be seriously impaired. Another possible strategy for prioritizing among targeted cases is by type of problem. If we know that the agency has greater success in addressing certain kinds of problems, e.g., eviction, we may wish to target services at that problem and at those at risk of that problem. Another strategy might be to focus on those families with whom the agency feels it can be most effective. This can be done on the basis of objective criteria (e.g., giving priority to those living with their parents, rather than friends) or it can be a decision subjectively made by caseworkers upon interviewing families identified as being at risk.

Possible Intervention Strategies

Although more affordable housing clearly would reduce a substantial portion of the homelessness found among public assistance families, HRA is not in a position to provide it. Therefore, HRA must limit its attention to providing the services traditionally associated with the agency, making the most effective use of available low income housing, and in striving to keep its policies, procedures, and staff development activities in keeping with the overall goal of reducing the incidence of homelessness among the families on its case load.

Housing Alert. The Housing Alert program is one of HRA's most directed efforts for stemming homelessness among public assistance families. The program relies on caseworkers from the Office of Family Services to assess and manage the needs of families that have been identified as being at risk of homelessness. Housing Alert case workers try to ensure that targeted families are receiving all benefits for which they are entitled and try to ease the difficulties faced in these homes by informing families of available services and giving them priority for those that are appropriate. Among the resources available to them are priority placement in day care centers for children in doubled up families, restaurant allowances for those with overtaxed or inadequate kitchen facilities, and persons trained in conflict resolution to try to ease family tensions and conflicts between landlords and tenants. Most centrally, the Housing Alert program emphasizes housing stability through legal intervention in landlord/tenant issues and assistance in ensuring the buildings are adequately maintained. However, Housing Alert workers cannot offer priority placement into permanent housing.

Based on this study's findings, it would appear that the Housing Alert model, with the appropriate resources, could be effective for many at risk families. Remembering that approximately 40 percent of those requesting shelter spent the most time last year in their own home, there is reason to believe that finding methods (like those considered in the Housing Alert model) to prevent the loss of that home could result in a significant reduction in homelessness.

Among those who are doubled up (more than 60% of the shelter requesters), the Housing Alert model may also offer some possibility of reduced shelter use, or at least a delay in shelter use. For those living with their parents (14%), enhanced benefits in terms of day care and restaurant allowances may provide respite in what is typically an extremely crowded situation. Furthermore, the availability of dispute resolutions counselors might be useful under these tense situations, where the vast majority of the young women are pregnant or have new babies (nearly three-quarters).

For those living with persons other than their parents (nearly half of those requesting shelter), especially for those who were once primary tenants (18%), the Housing Alert model may be least effective as it is now operated. Although one may delay the shelter request by "sweetening" the resources available to these doubled-up families and ease some of the burden of crowding with such things as restaurant allowances, the data do not indicate that such situations can be readily stabilized. Housing Alert might be greatly strengthened if priority placement in permanent housing could be added to the program. Especially for those families doubled up under crowded and difficult circumstances, the ability of the case worker to stabilize the household for a discrete period of time might be far greater than his/her ability to stabilize it indefinitely. For families in these situations, there is a strong disincentive to stay out of the shelter system if their ability to obtain permanent housing is enhanced by entering emergency housing. Some proportion of permanent housing units could be dedicated to those families that Housing Alert has determined can remain in their present living situation for only a limited period of time.

Legal Services/Eviction Prevention Model. HRA has also made a commitment to reduce homelessness by making accessible legal counsel to those threatened with eviction. This strategy may be an appropriate means of intervention, but only for a limited portion of those at risk of homelessness. For those who have never been primary tenants (approximately 40%) this method has no merit. Similarly, even among those who have had their own place, eviction is but one reason for loss of housing. Building conditions and crime are among the others cited.

It is critical that this legal model incorporate extensive outreach. The data indicate that many who are evicted never make it to court. Therefore, if a legal model to prevent eviction is to succeed in reducing homelessness among those who are primary tenants, it must reach out to those at risk and it must provide for assistance not only in preventing evictions but in ensuring proper building conditions and reducing landlord harassment.

Entitlement "buffers": There is little in the data to suggest that homelessness is caused by a single incident. Rather, it would seem that shelter requests are the result of the cumulative effects of a number of difficult and disruptive experiences. The "buffer" model, in which the agency will provide emergency money at one time and "recoup" this money later, does not seem to be an effective strategy for preventing shelter entry. The use of "one-shot" supplements is not likely to be a sufficient remedy to the problems faced by at-risk families. Rather, the need for an emergency check -- especially one that results from an administrative closing -- should instead be considered a signal that the family may have other needs which, if not met, will increase this family's risk of homelessness.

Resettlement and Community Supports. Approximately one-third of those entering shelter have used the emergency housing system some time in the past. For these families, the appropriate time to have prevented this episode of homelessness may well have been when they left the shelter system. Our study cannot speak to the kinds of policies or programs which would best enable families to become stably housed after leaving the emergency housing system. However, the need to ensure that effective programs are in place is surely reinforced by this study's findings.

Detoxification Programs. Although problems with substance abuse are reported by only a small number of homeless families, such families are at greatly elevated risk of becoming homeless. Given that having been in a detoxification facility is also associated with increased risk of shelter request, it would appear that programs aimed at rehabilitating those with drug and alcohol problems should also consider incorporating a housing component. Expansion of effective drug treatment programs, that provide for extended support in the housing arena, might be another method of reducing the incidence of homelessness among a portion of those at risk.

Mental Health Programs. The data do not suggest that homelessness is the result of mental health problems but for very few cases. Programs that aim to reduce the incidence of such problems in this population as a means of reducing homelessness are likely to meet with only limited success. Relatively few families can be assisted in this manner.

Parenting Programs and Family Planning Services. There is strong evidence that pregnancy and childbirth represent a serious stress for many public assistance families, especially those who are young and doubled up. Although not traditionally thought of in terms of homelessness prevention, parenting classes, infant care facilities, and family planning services may all be effective tools for reducing the incidence of homelessness, especially among young mothers. Helping young mothers and their families cope with the stress of a newborn or of a pregnancy, and providing services to reduce the incidence of unwanted pregnancies, may well be effective in keeping families out of emergency housing.

Foster Care. The relationship between foster care and group homes to homelessness is deserving of additional attention. Those who experienced such situations as children were more likely to be homeless as adults. For such people, the time to prevent adult homelessness may have been during childhood. Greater attention must be paid to setting policies appropriate to nurturing a successful transition into independent, adult living arrangements for those whose care in childhood or adolescence has fallen to the state.

The Problems of Black Families. Black, public assistance families are more likely to require emergency shelter. They are at greater risk of having tenuous ties to the permanent housing market and this, in turn, increases their risk of needing emergency housing. Housing policies and programs must be examined to ensure that race and ethnicity do not place additional barriers in the way of low-income, black families who are seeking housing in an extremely difficult market.

VII. CONCLUSIONS AND IMPLICATIONS FOR POLICIES TO PREVENT HOMELESSNESS

The survey information presented in this report represents significant new knowledge that is available to City officials and others concerned about the problems of homelessness among New York City families. This information can be used by City officials to better target efforts to provide services that can prevent episodes of shelter use by families. However, in addition to being key ingredients to the forecasting model that we are currently developing, the survey information allows for a comprehensive portrait of New York City's homeless family population. Importantly, the data set represents one of the first large scale data sets that can be used to compare characteristics of public assistance families which use emergency housing and characteristics of the general population of public assistance families.

Comparisons of public assistance families which become homeless and public assistance families which do not results in the identification of key risk factors that public officials can focus on when planning initiatives to reduce the need for emergency housing among poor families. The analysis presented in the report identifies a series of factors that clearly put some families at high risk of entering the City shelter system.

Some of the most important risk factors to emerge include:

- not having one's own place to live, especially if one has never been a primary tenant of an apartment,
- eviction from an apartment for families that have been primary tenants.
- past use of the shelter system,
- frequent moves and recent moves,
- current pregnancy and recent childbearing, and
- presence of what we term disruptive social experiences either as a child or as an adult.

Although the survey data identify these factors as ones which are strikingly different for the two populations we have studied, a result that may be just as important is the overwhelmingly consistent finding that on almost every measure of "well offness" or ability to function independently, homeless families are in somewhat worse shape than the housed public assistance population. Although the differences in the two groups are not dramatic for many of the individual measures, the cumulative effects of the higher incidence of numerous problems may be the major cause of many families' homelessness.

In thinking about preventive service policy, it is important to recognize that the empirical findings imply the existence of a number of distinct pathways to homelessness. Some of the EAU families have very different housing experiences than others, and probably need different types of help if they are to avoid homelessness. As with so many other social problems in a complex and large city like New York, we find that the homeless families problem is not one problem but a series of distinct problems facing distinct categories of families.

One way of categorizing distinct pathways to homelessness is to distinguish:

* the evicted homeless, who had their own place to stay but were evicted or left because of rent problems; these families comprise 18 percent of our homeless sample,

* recent primary tenants who left their apartments for reasons other than eviction or inability to pay the rent; these families comprise 19 percent of our sample,

* less recent primary tenants who have not had a place of their own in at least one year; these families comprise 19 percent of the sample;

* families which have never had their own place to live and spent the most time last year living with their parents; these families comprise 14 percent of the sample.

* families which have never had their own place to live and spent the most time last year living with others; these families comprise 30 percent of the sample.

Clearly, in discussions of possible preventive service initiatives, separate discussions should focus on potential interventions for previous shelter users, individuals who are doubled up, especially if living with individuals who are not closest of relatives, and young mothers and pregnant women. It also is worthwhile to consider initiatives that focus on the small but high risk subgroups of families that have been participants in detox programs or that have problems associated with mental illness, especially if the head of the household has spent time in a mental hospital.

One finding of particular concern is that being doubled up with another family often represents an interim situation that eventually leads to a spell of shelter use. Given the large number of public assistance families currently doubled up (our data suggest the aggregate number of doubled up families on public assistance city-wide is approximately 30,000 at any single point in time), preventive service initiatives need to develop methods for making such situations more stable. Alternatively, finding apartments for a large subset of this doubled up population may be the only alternative for reducing the flow into emergency housing.

A second finding of particular concern is the startling frequency of shelter use among pregnant women and new mothers. It is striking that 17.7 percent of all pregnant women who are on public assistance spend some time in a shelter and that 7.7 percent of all public assistance families that have new babies spend time in a shelter before the baby is one year.

Some of the shelter use among pregnant women may have been induced by policies giving special treatment to pregnant women and these policies have been changing since the time of our survey. However, our multivariate analyses indicate that pregnant women are not only at high risk of becoming homeless, but also at high risk of living in unstable housing arrangements. Thus, it is likely that pregnant women will continue to be frequent users of shelters due to their precarious housing arrangements, even if preferential policies are changed. It also should be noted that the housing needs of pregnant women do differ from those of other families; thus, in designing shelters some consideration should be made for these special needs.

One other policy concern highlighted by our data is the frequency of repeat use among the shelter user population. The fact that 32 percent of those we interviewed while requesting shelter had used the emergency housing system in the past points out that outplacements from the shelter system are not always long lasting. The repeat users are an important subsample on which to focus attention since the long run benefits of preventing chronic shelter use for this set of families could be substantial.

The central conclusion of this project is that, short of a miraculous increase in the availability of low-income housing, there is no one strategy that is going to solve the problem of homeless families in New York. However, several policies and programs are likely to have a significant, although incremental, impact on addressing the problem. In identifying those policies and programs, it should be clear that it is critical that the interventions be appropriately targeted to families. For some, the need is assistance in maintaining existing housing. For others, existing living arrangements may only be temporary and assistance must be offered in finding permanent housing. For others still, the interventions may, on the surface, appear to be unrelated to housing, but their long run impact will be to reduce those factors which contribute to a family's risk of homelessness.

We hope that the analysis presented in this report provides useful background information to stimulate a discussion of policy options the City can consider in developing initiatives to reduce the flow of families into the emergency housing system. In particular, we would like to focus discussion on initiatives that are within the domain of the Human Resources Administration, which is responsible for managing the City's emergency housing system. Most relevant would be preventive service initiatives that focus on methods for easing the difficulties of low income families in coping with the very tight housing market facing individuals with modest resources.

GLOSSARY

PREVIOUS PRIMARY TENANT:
Respondent was a primary tenant for at least a one year period, but not at the place stayed at longest during the past year. For each of the "family type" variables, the reference group includes families who were primary tenants at the place stayed at longest last year.

STAYED WITH PARENTS:
Respondent has never been a primary tenant and stayed with parents for the longest time during the last year.

STAYED WITH OTHERS:
Respondent has never been a primary tenant and has not lived with their parents for the longest time during the past year.

TWO MOVES:
Respondent has moved at least twice during the past year.

EVER EVICTED:
Since having children or becoming pregnant, respondent has been evicted.

EVER DOUBLED:
Since having children or becoming pregnant, respondent has lived together with another person or family.

PRIOR SHELTER:
Respondent has previously been in a shelter or welfare hotel.

EVER DETOX:
At some time, respondent has been enrolled as a patient in a detox or treatment center for drug or alcohol abuse.

EVER SSC:
At some time, respondent has had a caseworker from Special Services for Children (SSC) or the Bureau of Child Welfare (BCW).

DISRUPTIONS:
Respondent experienced at least three of the following nine disruptive experiences:

Before turning 18 years old:
- lived in a foster home

- lived in an institution or group home
- ran away from home, a group home, or institution for a week or more
- lived on the street, a public place, an abandoned building, the subway, or a similar place
- been physically abused
- been sexually abused

As an adult:
- been physically abused or threatened with violence by a person the respondent was involved with.

Within the past year:
- stopped living with a boyfriend
- told to leave by parents.

CURRENT PREGNANCY:
Respondent was pregnant at time of interview.

BABY PAST YEAR:
Respondent gave birth within the past year.

FREQ CLOSE:
Family has experienced two or more administrative closings during the life of the case.

BONUS ADM:
Family is receiving a bonus payment as a result of child support payments.

RECOUPAD:
Family is having funds recouped by the agency, typically as the result of an earlier emergency payment.

FOSTER:
Head of family had been in foster care before turning age 18.

INSTITUTION:
Head of family had been in an institution or group home before turning age 18.

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A STUDY OF HOMELESS FAMILIES IN NEW YORK CITY: CHARACTERISTICS AND COMPARISONS WITH OTHER PUBLIC ASSISTANCE FAMILIES

(FINAL REPORT: VOLUME 2)

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EXECUTIVE SUMMARY

This report presents a detailed portrait of homeless families in New York City and compares characteristics of families that use the City's emergency housing system and public assistance families that do not. The analysis and information presented in this report compares the characteristics and experiences of a sample of 704 families which requested emergency housing at the City's Emergency Assistance Units (EAUs) and 524 families that are representative of the general public assistance family population in the City. The purpose of the report is to describe the data set that has been assembled to study the dynamics of homelessness among families and to compare homeless families with the comparison sample of housed families.

Information about shelter requesters and general public assistance families comes from an in-person survey conducted between February and July of 1988 for New York University by Louis Harris and Associates. The families seeking shelter were interviewed at EAUs where families are assigned a temporary place to stay. The public assistance families that form our comparison group were interviewed at a random sample of Income Maintenance Centers (IMCs) around the City at the time of scheduled appointments for periodic re-certification.

In examining the housing histories for these families, we note that among families seeking emergency housing, 82 percent had stayed with families, friends, or in public places on the evening before requesting shelter. The data also indicate that "doubled up" arrangements dominate the housing situations of homeless families during the year prior to seeking shelter. Almost half of the families seeking shelter have never had a place of there own.

The most frequently cited reason for leaving the place stayed last night and the place stayed for the longest period of time in the previous year is a problem with a doubled up situation. The fact that so many families who become homeless are living as secondary tenants consistently emerges as a key risk factor. Evictions, rent problems, and landlord harassment accounted for relatively small proportions of the reasons given for leaving the place stayed last night. However, these reasons for leaving emerge far more prominently in regard to why the respondents left their own place.

Even though the sampling design excluded families who had used shelters within 30 days of the interview, 31 percent of those seeking shelter had done so previously. For the general public assistance population, seven percent reported spending time in the shelter at some point in the past. Thus, an important predictor of future shelter use is past use of shelters.

Pregnancy and recent childbearing were found to be among the most salient issues in understanding current utilization of New York

City's family shelters. Current pregnancies and recent births exhibit a strong relationship to entry into the shelter system. In contrast, teen motherhood and large family size have only a small impact on risk of homelessness.

Among those who were homeless, 35 percent indicated that they were pregnant at the time of the interview, as compared with six percent of those who were housed. Similarly, 26 percent of the homeless stated that they had given birth in the past year as compared with 11 percent of those who were housed. The age compositions of the homeless and housed groups do not account for the dramatic differences in fertility.

Clearly, there is a dramatic relationship between pregnancy and recent births, and requests for emergency housing. However, the exact nature of this relationship remains unclear. Policies which favor pregnant women and new mothers in the shelter system may encourage greater shelter use among this group. The strains of a new baby may make an already difficult housing situation impossible. Or pregnancy may be a correlate of the pre-shelter situation. Regardless of the underlying causal relationship between pregnancy, childbirth and homelessness, the problems and needs of women who are pregnant or who are caring for newborns are distinct from those faced by other mothers. The burden faced by the city in trying to provide these families with adequate emergency shelter is especially great.

Health and mental health problems are somewhat more prevalent among the homeless than the housed -- especially within age groups -- but only a minority of the homeless are affected by such problems. Families on public assistance are plagued by the types of health problems that typify persons in poverty: asthma, bronchitis, high blood pressure, etc. Among those who are older, such health problems appear to be endemic. Although the issue of health care for the homeless has received substantial attention, it would appear that the health problems of all welfare families need to be addressed.

Mental health problems are a problem for fewer of the families interviewed than are problems of physical health. It is important to stress that this is not a population that one would characterize as mentally ill. Substance abuse, however, does appear to be related to homelessness. Within age categories, homeless families were substantially more likely than housed families to suffer from problems resulting from use of drugs and alcohol and to have entered a detoxification or treatment facility. But like other physical and mental health problems, it is a problem for a minority of the homeless families.

Prior shelter use is correlated with both problems of physical health and mental health, including substance abuse. The interpretation of this finding is difficult. Use of emergency housing may, in fact, pose a risk to the physical and emotional well-being of a family. It is also possible that those families experiencing physical and mental health problems are least likely to extricate themselves from homelessness; they are the families most likely to become repeat users of the system.

Although fertility and health problems were found to be more prevalent among the homeless, both the EAU and IMC samples can be characterized by high rates of multi-generational welfare dependence, poor educational attainment, and poor employment histories. This discovery is neither new nor surprising. What is surprising is that these factors are very poor predictors of homelessness. Although having had a parent on welfare does seem to increase one's risk of entering emergency housing, this constellation of welfare and work factors adds little to our understanding of the differences between the housed and homeless poor in New York City.

If one wishes to address the problem of welfare dependency, then education, work history, and prior family use of public assistance must all be considered. However, if our aim is to target services to prevent homelessness, variables of education and employment do not appear to be of merit. For families on public assistance, increased educational attainment or job experience do not seem likely to be effective strategies for keeping families from entering emergency housing.

In addition to looking at earlier welfare dependence and education and work histories, the social networks of the respondents were examined. Surprisingly, respondents from the EAUs were more likely than respondents from the IMCs to report that they had a mother or grandmother living, another close relative, or a close friend. However, they were less able to draw on their social network for housing assistance because network members had less room for them, because they had already worn out their welcome by doubling up with the network members, and because the quality of their social ties, as reflected in disruptive social experiences, was relatively poor.

An index of six early disruptive experiences -- living in foster care, in an institution, or on the street, running away, or being physically or sexually abused as a child or teenager -- and a second index of three recent experiences -- ceasing to live with a boyfriend, being told to leave by one's parents, or being abused as an adult -- both differentiated between the EAU and IMC samples. The differences were strongest for the younger age groups, where disruptive experiences were two to three times as common among those seeking shelter as among those stably housed.

Perhaps the finding that is most salient is that there is not one route to homelessness. Rather, subgroups emerge based on characteristics of their housing histories and their age. For those who have never had a stable and independent living arrangement the route to homelessness is necessarily different from that of families who until most recently were in stable housing situations. Recognition of these distinctive groupings is critical both for forecasting families at risk and for developing strategies for addressing this problem.

TABLE OF CONTENTS

SECTION PAGE

I. Introduction 1

II. Study Design and Methodology 8

III. Housing Factors 14

IV. Pregnancy and Parenting Factors 39

V. Health, Mental Health, and Substance Use 50

VI. Welfare, Employment, and Education 64

VII. Social Relationships 75

VIII. Pathways to Homelessness 87

IX. Conclusion 102

X. Appendices 105
  A. Income Maintenance Centers Sampled
  B. Survey Instruments
    1. For EAU Sample
    2. For IMC Sample

I. INTRODUCTION

The problem of homelessness, in general, and homeless families, in particular, is not an unfamiliar one to the United States or New York City. Families in need of emergency shelter are not a new phenomenon. And yet, the problem of homelessness as it exists in this nation in the 1980's is unique in scope and nature. This is especially true of the female-headed families with children who comprise most of the families without homes; their numbers are growing and the apparent intractability of their problem is increasing. Across the country family members may comprise one third of the overall homeless population (Bassuk, 1988).

The problem has become particularly acute in New York City. It has been extraordinarily difficult to expand the supply of emergency shelter to meet the growing demand. The Human Resources Administration, faced with the responsibility of sheltering those without homes, often finds itself in the difficult situation of having a larger number of families entering than leaving the shelter system. Its average daily caseload exceeds 4,000 families in shelters (HRA, 1986 memo). Simultaneously, significant numbers of poor New York City families are doubled and tripled up in apartments, while others continue to live in substandard facilities; these families doubtless include many who will require emergency shelter in the future (Community Service Society, 1984b; New York State Department of Social Services, 1984).

Several economic trends have contributed to the growth in homelessness. There has been a substantial decline in the availability of low income housing units. Arson and building abandonment have contributed to this situation. While the City's households have become poorer, less expensive housing units have been replaced by more expensive ones (NYS Dept. of Social Services, 1984). A waiting list of more than 200,000 families exists for the Housing Authority's 175,000 public housing units (Annual Report of the NYC Housing Authority, 1985). The vacancy rate for low rent apartments in New York City was estimated to be just two percent in 1987 (Stegman, 1987), and vacancy rates are lowest among the stock of low rent units. An increased rate of eviction has accompanied the low vacancy rate (Community Service Society, 1984b). The reduction in low income housing has also been coupled with high rates of poverty and unemployment, particularly for minorities and families with young children; one-third of minority children live in poverty (The New York Times, 8/86).

HRA is responsible for providing shelter despite the extreme limitations of New York City's low-income housing market. Managing this problem (i.e., providing emergency shelter while the need for housing grows more acute) requires that HRA be able to effectively and efficiently target interventions that will ameliorate the effects of crowding, displacement, and inadequacy that accompany the current housing situation. The above-described economic trends help us to understand why homelessness is a growing problem. However, they do not help to identify and assist those individuals who are at greatest risk of homelessness.

This report represents one product of an effort by HRA to better understand the characteristics of families seeking emergency shelter and to develop an early warning system that can be used to identify in advance families at high risk of becoming homeless. The targeting system that is described in a companion report will be useful as HRA develops new initiatives to reduce the need of families to use public shelters.

The analysis and information presented in this report compares the characteristics and experiences of a sample of 704 families which requested emergency housing at the City's Emergency Assistance Units (EAUs) and 524 families that are representative of the general public assistance family population in the City. The purpose of the report is to describe the data set that has been assembled to study the dynamics of homelessness among families and to compare homeless families with the comparison sample of housed families. In related work, we use this data set to develop forecasting models for high risk families and to devise an early warning system that can target families likely to become homeless in the future.

Information about the 704 EAU families and the 524 general public assistance families comes from an in-person survey conducted between February and July of 1988 for New York University by Louis Harris and Associates. The 704 families seeking shelter were interviewed at Emergency Assistance Units where families are assigned a temporary place to stay. The 524 public assistance families that form our comparison group were interviewed at a random sample of Income Maintenance Centers (IMCs) around the City at the time of scheduled appointments for periodic recertification.

Demographic profiles of the two samples are presented in Table 1. In both samples the respondents were overwhelmingly female. The EAU sample has a higher proportion of Black respondents than does that for the IMC (this is discussed in greater detail in the methodology section). Those seeking shelter were also substantially younger than those who were housed. It is also noteworthy that the EAU sample was more likely to report being married than those in the IMC. This may be due to the fact that there is more incentive for those seeking shelter to admit being married in order to facilitate placement as a couple with children. For those interviewed at the IMC, admitting to the presence of a husband or boyfriend could result

Table 1

DEMOGRAPHIC PROFILE FOR THE EAU AND IMC SAMPLES

	EAU	IMC
Sample Size	704	524
Ethnicity/Race		
Black, Not Hispanic	54%	32%
Puerto Rican	33%	41%
Other Hispanic	7%	18%
White	4%	5%
Other	2%	4%
	100%	100%
Gender		
Female	96%	95%
Male	4%	5%
	100%	100%
Location of EAU/IMC Interview		
Manhattan	40%	11%
Bronx	38%	26%
Queens	1%	13%
Brooklyn	21%	49%
	100%	99%
Marital Status		
Married or Living with Boyfriend/Girlfriend	23%	9%
Separated or Divorced	19%	44%
Widowed	1%	3%
Single	5%	44%
	100%	100%
Age of Respondents		
25 or younger	44%	18%
26-30	29%	21%
31-40	23%	35%
40+	4%	26%
	100%	100%

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

in withdrawal of benefits.

The survey asked questions about a range of issues related to families' risk of becoming homeless. In this report, we organize a description of the information in the following categories:

* Housing Factors;
* Pregnancy and Parenting Factors;
* Health, Mental Health, and Substance Abuse Factors;
* Welfare, Employment, and Education Factors; and
* Social Relationship Factors.

For each type of factor, the report compares characteristics of the sample seeking emergency housing with the sample of housed public assistance families. The discussion focuses on the identification of factors that distinguish the two samples. These factors are the building blocks for the forecasting model presented in the companion report.

An important theme that emerges from the data is that the homeless families population actually includes a number of distinct subsets of families. That is, the data suggest that there are a series of pathways to homelessness. Because of this, we attempt to assess not only relative characteristics of homeless and non-homeless families but also reasons why different categories of homeless families seem unable to maintain viable housing arrangements.

The following section of the report describes the methodology used to collect the information. Following this background material are five distinct sections that describe the findings related to each of the specific types of factors studied. Each of these sections starts with a one page summary of the findings reported in that section so that those readers reviewing this report quickly can have a short version of key points. After the summary, each section provides the background that motivates the analysis, findings, and then a discussion and an assessment of implications for policy and further analysis. The analysis of distinct subgroups of homeless families and the related discussion of pathways to homelessness follow the five sections that focus on single types of factors. The final section of the report presents general conclusions and implications for our future analysis.

In reading the report, a few caveats and cautions should be kept in mind. Most importantly, the analysis presented in each section tends to look at one potential risk factor at a time. In places, we break out results for obvious subgroups of the two samples, but in general the scope of the analysis reported here is "bi-variate". When relevant, we do refer to the multivariate analysis reported in other volumes of the Final Report. We refer to these analyses whenever there are differences in implications between the bi-variate and multivariate findings.

Another minor caution involves our sometimes equating families which seek emergency housing at an EAU with families which actually use emergency housing. In fact, a small number of families seek housing on any given night but either do not wait the two or more hours it takes to obtain an assignment or never show up at the assigned shelter for one reason or another (sometimes because they do not like the place assigned). We currently are obtaining information that will identify families which never show up at a shelter; the analysis reported here, however, in a strict sense compares shelter requesters to the comparison sample of housed families.

A final caveat is that the data reflect the dynamics of homelessness during the first half of 1988. In planning and implementing the data collection effort, we found that the composition of shelter requesters can change quickly over time, perhaps due to changes in the environment and probably due in part to changes in policies that affect allocation of shelter beds. For example, when the City makes changes in the priorities for assignment and out-placement that it gives to pregnant women, these policy changes may quickly affect the incentives for different population subgroups to seek emergency housing.

Any survey such as reported here represents a snapshot of characteristics at one point in time. It is not possible to assure that all characteristics of homeless families remain the same over time based on a single survey.

II. STUDY DESIGN AND METHODOLOGY

The main purpose of this study is to assess differences between families on public assistance who eventually require emergency housing and those who do not. In order to meet this objective, a 25-minute interview, (see Appendix B) assessing such risk factors as housing conditions, social history, family contacts and demographic characteristics was administered to 704 families on Public Assistance (PA) requesting shelter and 524 families on PA not currently in need of emergency housing.

Families requesting shelter were interviewed at the Emergency Assistance units (EAUs) in Brooklyn, Manhattan, and the Bronx. The survey of public assistance families not in need of shelter took place at Income Maintenance Centers (IMC) during quarterly face-to-face re-certifications.

The EAU Sample

Data were collected from families on public assistance who requested shelter through the Emergency Assistance Units (EAUs), for the purpose of identifying key differences between EAU and IMC groups. The city's four Emergency Assistance Units are open between 4 p.m. and 4 a.m., seven days a week. Anyone seeking shelter or emergency assistance other than medical care is directed to one of these units. A 10 day pilot study revealed that only a small number of people requested shelter through the Queens EAU and, therefore, it was eliminated from the study. It was also discovered during the early stages of the fieldwork that almost all persons requesting shelter did so between 5 p.m. and 11 p.m., Monday through Friday; interviews were limited to these hours between February 19 and July 15, 1988.

Interviewers screened respondents while they waited to go through the intake procedures at the EAUs. Interviewers approached respondents, told them about the study, and screened them to determine whether or not the family was eligible for participation. Only those individuals who 1) were currently on public assistance or had been on public assistance during the last six months, 2) had not been in a shelter for at least 31 days and 3) had children (or were pregnant) at the time of their request for shelter were deemed eligible for inclusion in the sample. This ensured that the sample was comprised solely of welfare families for whom this was a new episode of shelter entry. All those who agreed to participate were asked to sign a written consent form which guaranteed the confidentiality of the interview.

All told, 6,526 individuals were screened at the EAUs and 972 (15%) met the eligibility requirements. A great many of those screened had been in the shelters at some time during the last month. Of these, 704 (72%) were interviewed. The disposition of individuals approached in the EAUs is shown on the next page.

FINAL EAU SAMPLE DISPOSITION

Number of Individuals Screened	6,526
Number Meeting Criteria	972
Completes	704
Refusals	268
Total	8,470

RESPONSE RATE: 72%

The IMC Sample

A total of 448 families on public assistance were selected and interviewed at the income maintenance centers (IMCs) during the first three weeks of March and April, 1988. Families selected for inclusion in the study were identified in three stages. First, twelve of the 40 IMCs were randomly selected for inclusion in the study with sampling probability proportionate to size. In order to insure as unbiased a sample as possible, two days of each week (excluding weekends) were randomly selected for interviewing at each IMC. Interviewing took place between 9 a.m. and 3 p.m.

A quota of approximately 35 interviews per IMC was established. Since "high risk" cases are seen in the first week of the three week eligibility period each month, quotas for each week of the data collection period were established to insure an equal distribution of cases during the entire recertification

period. A list of sampled IMCs can be found in Appendix A of this document.

At each site, twelve eligibility specialists in the undercare section were randomly selected. A list of sampled workers was provided to the interviewers. Interviewers selected specific cases by approaching the first of the twelve selected eligibility specialists and determining whether or not that particular worker had a scheduled eligibility appointment during the first hour of interviewing (9-10 AM). If the first specialist on the list had no appointments during that hour, interviewers were instructed to go to eligibility specialist number two and determine whether or not this person had an appointment for that hour, and so forth, until an eligible respondent was located for hour number one. When the first interview had been completed, interviewers were instructed to select the next eligibility specialist on their list, following the one who had just provided an eligible respondent.

Respondents were referred to the interviewers by their eligibility specialists. The interviewers explained the nature of the study to potential respondents and requested their participation. Individuals who agreed to participate were asked to sign New York University's human subjects' written consent form before being were interviewed.

In addition to using this method to interview those heads of families who arrived for their scheduled appointments, interviewers were required to enumerate those families who did not show up for their recertification appointment. Overall, approximately 10% of the appointments among sampled eligibility specialists were "no shows". A quota of approximately 40 interviews with families who did not show up for their appointments -- proportional to the overall number of "no-shows" -- was established in order to develop as representative a sample as possible. Respondents in these families were interviewed during a rescheduled visit or by telephone.

A total of 745 families scheduled for their recertification appointments were selected for the study, using the hourly rotation method described above. A total of 524 selected families agreed to participate in the study, for an overall response rate of 70 percent. These figures include a total of 36 families who did not show up for their original appointment and who were interviewed during their re-scheduled appointment at the IMC (28 cases) or by phone (8 cases).

The 524 public assistance respondents include an oversample of 76 Black respondents who were surveyed using the procedures described above at the Brownsville and Bushwick IMC's to insure stability of ethnic comparisons. Such oversampling was

necessitated by the fact that the original sample did not include a sufficient number of blacks to permit subgroup analyses.[1]

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[1] Questions have been raised about the "true" ethnic distribution of the AFDC population in New York City. The sampling technique described above yielded the following distribution: 48% Puerto Rican, 22% other Hispanic, 20% black, and 3% other. This is substantially different from other estimates of this population. For example, according to data from the 1987 Housing and Vacancy Survey, 38% of the public assistance households (families and singles) are black, 36% Puerto Rican, 17% white, and 9% "other." However, there are questions raised by these estimates; for example, how would these estimates change if a category for non-Puerto Rican Hispanics was included, as it was in this study? Estimates for the New York City population, as a whole, are that there are as many non-Puerto Rican Hispanics as there are Puerto Rican Hispanics. In this case, the ethnic breakdown of the AFDC population, obtained by the IMC sampling technique, would seem accurate. In any case, different weighting formulas were applied to the data set, to adjust for possible biases in the ethnic composition. Weighting had little effect on the analyses and the decision was made to present unweighted analyses only.

Housing Factors
Summary

To understand the dynamics between housing factors and risk of homelessness, three aspects of residential history are considered:

* the place where the family stayed the night before being interviewed,
* the place where the family stayed for the longest period of time during the previous twelve months, and
* the last place, if any, where the family was the primary tenant.

Among families seeking emergency housing, 82 percent had stayed with families, friends, or in public places on the evening before requesting shelter. The data also indicate that "doubled up" arrangements dominate the housing situations of homeless families during the year prior to seeking shelter; 50 percent are doubled up at the place stayed last year, and 81 percent have been doubled up at some point in the past. Almost half of the families seeking shelter have never had a place of there own. Each of these percentages is substantially higher than the percentage for the comparison sample of public assistance families.

Families rarely come directly from a place where they have lived for a long period of time to the city shelter system. Only four percent of homeless families came to the EAUs directly from the place where they stayed the longest in the previous year. Sixty two percent of the EAU sample had been at the place where they stayed the night before seeking shelter for one month or less.

The most frequently cited reason for leaving the place stayed last night and the place stayed for the longest period of time in the previous year is a problem with a doubled up situation. The fact that so many families who become homeless are living as secondary tenants consistently emerges as a key risk factor.

Evictions, rent problems, and landlord harassment accounted for 16 percent of the reasons homeless families left the place stayed last night, 25 percent of the reasons homeless families left the place where they stayed for the longest period of time in the past year, and 45 percent of the reasons homeless families who had their own place at some point in time left this place.

Even though the sampling design excluded families who have used shelters within 31 days of the interview, 31 percent of those seeking shelter had done so previously. For the general public assistance population, seven percent reported spending time in the shelter at some point in the past. Thus, an important predictor of future shelter use is past use of shelters.

III. HOUSING FACTORS

Background

The direct precipitant of shelter use among families is some crisis in the housing circumstances of the family unit. Families seek assistance from the City for emergency housing when a current housing arrangement becomes untenable. While much of this report focuses on factors which are indirect precipitants in the sense that they seem to lead some public assistance families to experience housing crises while other families do not, this section of the report compares the recent housing arrangements for shelter users and non-users.

In assessing the problem of homelessness among families, most experts have placed emphasis on the shortage of housing opportunities for low income residents of New York City. Many forces shaping the City economy have resulted in reductions in the supply of housing that typically is used by low income populations. These forces have included urban renewal in both its public and private forms, reductions in the number of new federal public housing initiatives, and the deterioration through fires and abandonment of extensive housing stock, particularly in some neighborhoods of Brooklyn and the Bronx.

Although it is clear that New York has a tight housing market for its low income populations and that additional low income housing would help to alleviate the problem of homelessness, we have known little about the actual housing experiences of families who end up using City supported emergency housing, and very little about the experience of homeless families relative to that of other low income families who manage to retain housing arrangements despite the tight housing market.

Information about housing arrangements prior to episodes of shelter use can be useful for public policy makers interested in developing preventive measures to circumvent the need of City residents to use emergency housing. What are the reasons families leave their place of residence to enter a shelter? What are the characteristics of these places of residences? How much residential mobility precedes shelter use? And, what have been longer run experiences with the housing market for homeless families?

In this section of the report, we attempt to answer questions like these using the rich set of interview data collected during the survey of shelter users and the comparison group of housed public assistance families. Over half of the survey focused on questions concerning housing experience. The housing data measure factors relevant to three aspects of residential history:

* the place where the family stayed the night before the interview (the interview took place on the first day of an episode of shelter use),

* the place where the family stayed for the longest period of time during the previous twelve months, and

- the last place, if any, where the family was the primary tenant.

For some families, of course, the place where they stayed for the longest period of time is the same as the last place where the family was the primary tenant. Among the income maintenance center (IMC) sample, 86 percent of families were the primary tenant at the place stayed longest last year (see Table 2). In the case of the emergency assistance unit (EAU) sample, this percentage is just 37 percent.

Most families who were interviewed at the EAUs had spent just a short period of time at the place where they stayed the previous evening. For the EAU sample, 62 percent of the families had moved from the place where they had stayed longest during the past year within one month of the time they requested emergency housing (see Table 3). Thus, these families had been at the place they stayed just prior to entering a shelter for at most one month.

We think most attention should be focused on the place where the family stayed for the longest period in the last year and the last place where the family was a primary tenant since these are places where preventive interventions most likely can take place. The place stayed the previous night often is a temporary expedient of little policy significance given that most families spent just short periods of time at this place. The place stayed the night before the interview is of most interest for understanding one aspect of the pathways to homelessness.

Findings

The Place Stayed the Night Before the Interview. Almost all (82 percent) of the families who were interviewed as they applied for emergency housing had spent the previous evening either with family or friends or in public places such as the subway or streets (see Table 4). In the case of the comparison sample of families interviewed at the IMCs, however, just 12 percent had spent the previous evening with families and friends, and none reported that they spent the evening in public places. Among EAU families, 34 percent spent the previous evening with relatives (including 15 percent who stayed with parents) and 35 percent relied on friends for a place to stay.

One of the striking findings related to housing history is that just four percent of EAU families came directly to the EAUs from the place they lived at longest last year (see Table 3). Virtually all families that seek emergency housing move from a relatively stable housing situation to a situation characterized by short stays in unstable housing arrangements.

We found that even families who were primary tenants at the place where they stayed longest last year are highly unlikely to come directly from this place to the EAU. Ninety eight percent of these former primary tenants make some temporary stops before

Table 2

PRIMARY TENANCY

	EAU	IMC
Primary Tenants At Place Stayed Longest Last Year	37%	86%
Once Were Primary Tenants But Not At Place Stayed Longest Last Year	18%	2%
Never Have Been Primary Tenants	44%	12%

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Table 3

TIME SINCE LEAVING PLACE STAYED AT LONGEST LAST YEAR

	EAU	IMC
Have Not Left	0%	86%
Left Last Night	4%	0%
Less Than One Month Ago	62%	2%
Two - Three Months Ago	10%	3%
Four - Six Months Ago	12%	6%
More Than Six Months Ago	12%	3%

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

seeking shelter; forty one percent move to another place where they are primary tenants while fifty seven percent spend the night before seeking emergency housing with family, friends, or (a few) in public places.

These findings do not vary substantially across subgroups of the EAU sample. For example, in the case of families headed by somebody under 25 years of age, 86 percent stayed with families, friends, or in public places. In the case of families headed by a pregnant woman or a recent mother, 80 percent stayed with families, friends, or in public places. For both the young and the expectant or new mothers, we found somewhat higher percentages of families staying with parents (21 percent for the young subsample and 19 percent for the expectant or new mothers compared to 15 percent for the complete EAU sample).

The main reason reported for leaving the place stayed the previous evening by those seeking emergency housing was some problem associated with the sharing of a residence (see Table 5). The specific reasons, which in aggregate accounted for 58 percent of explanations for seeking emergency housing, ranged from inability to get along with others sharing an apartment to problems of eviction or threats of eviction experienced by the primary tenant to a general feeling that the family could not continue to impose on the primary tenant.

Table 4

PLACE STAYED LAST NIGHT

	EAU	IMC
Own Place	18%	88%
Parents	15%	7%
Relatives	19%	2%
Boyfriend	2%	0%
Other Friends	35%	3%
Public Places - All Others	11%	0%

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

We found that problems with the doubled up situation accounted for 69 percent of the reasons for seeking emergency housing for the subsample of families which stayed with others the previous evening and accounted for 75 percent of the reasons for families living with others at the place stayed longest last year (see Table 5). For the subsample which had been primary tenants for a major portion of the past year, problems with a doubled up situation still accounted for 31 percent of the reported reasons for seeking emergency housing. How could such a high percentage of this latter group of former primary tenants report that problems with a shared housing situation led to homelessness? The reason, again, is due to the fact that most of these families (98 percent) did not go directly from being primary tenants to seeking city shelter.

Evictions accounted for 16 percent of the reasons for leaving the place stayed the previous evening, and rent problems or landlord harassment led to another five percent. Just seven percent of families left due to a building problem such as the place of residence being sold or condemned. The final 14 percent of the sample reported a wide range of individual reasons for seeking shelter, such as medical problems, criminal victimization, and discharge from jail, hospitals, or treatment programs. None of our sample reported that they were forced to seek shelter due to a fire. This finding, however, reflects City

Table 5

REASONS FOR LEAVING THE PLACE STAYED AT LAST NIGHT

	Complete EAU Sample	Families Staying With Others Last Night [1]	Families Staying With Others Last Year [2]	Families With Own Place Last Year [3]
Sample Size	701	573	441	260
Eviction				
Rent Related	9%	5%	4%	20%
Not Rent Related	7%	4%	2%	12%
Other Reasons Related to Rent or Landlord	5%	4%	3%	9%
Problems With Persons Who Share Apt.	58%	69%	75%	31%
Problems With Apt. Bldg.	7%	5%	3%	14%
All Other	14%	13%	13%	14%

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

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[1] Some of these families also stayed with others for the major portion of the last year; other families in this category had their own place last year.

[2] These are families who were secondary tenants at the place they stayed the longest last year.

[3] These are families who were primary tenants at the place they stayed the longest last year.

policy that fire victims receive housing assistance through the Department of Housing Preservation and Development rather than through the Human Resources Administration, thus bypassing the EAUs.

Place Stayed At Longest During the Previous Year. If policies directed at preventing homelessness are to be effective, it is important to understand the characteristics of the last stable place of residence for the family. This is particularly the case given the finding that a large share of families seeking shelter had not spent a long period of time at the residence that immediately preceded a stay in the city shelter system.

Among the EAU sample, 39 percent reported that the place stayed at for the most time the previous year had been their own place, that is a place where they had been the primary tenant (see Table 6). By contrast, 88 percent of the comparison group reported that they had been primary tenants. As often hypothesized, having one's own apartment apparently reduces the risk of future shelter use by a substantial amount.

Among the EAU sample, 52 percent reported living in somebody else's residence in a doubled up arrangement during the major part of the previous year. Among this 52 percent of the sample is included 19 percent staying with parents, 15 percent with other relatives, and 18 percent staying with boyfriends or other friends. Just 11 percent of the income maintenance sample reported living at other people's residences with the majority of these staying with parents.

The EAU sample included 44 families (seven percent) which spent the longest period of the past twelve months in a public shelter. This is a rather large number given our sampling criteria that excluded families which had been in a shelter within the past 30 days. In addition to the seven percent of families which reported that shelters were the place they stayed at the longest last year, we found another 16 percent of the sample which had spent at least some time in shelters during the previous 12 months (see Table 7). In total, 31 percent of the EAU sample had spent some time in shelters since having children; 23 percent were in shelters in the previous 12 months and eight percent spent time in shelters more than one year prior to the interview.

Among the comparison group of general public assistance families, seven percent report some experience with public shelters. Three percent used shelters within one year of the interview and four percent used shelters more than one year ago.

The EAU sample reports substantially greater residential mobility than the IMC sample; 38 percent of the EAU sample had two or three residences in the previous 12 months and 18 percent had four or more residences (see Table 8). Just 12 percent of the IMC sample had two or three residences and just 2 percent had

Table 6

TYPE OF HOUSING ARRANGEMENT: PLACE STAYED AT LONGEST IN PAST YEAR

	EAU Sample	IMC Sample
Own Place	39%	88%
Parents	19%	7%
Other Relative	15%	2%
Boyfriend	3%	0%
Other Friends	15%	2%
Shelter	7%	1%
Public Place	2%	0%

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Table 7

PREVIOUS SHELTER USE

	EAU	IMC
Never Used Shelter in Past	69%	93%
Last Use: Within 3 Months	10%	2%
3 - 6 Months	7%	1%
7 - 12 Months	6%	0%
More Than One Year Ago	4%	2%
More Than Two Years Ago	1%	0%
Three or More Years Ago	3%	2%

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

four or more residences. Over a three year time period, 77 percent of the EAU sample had moved at least once while 28 percent of the IMC sample moved one or more times.

The residential mobility of the EAU sample also is reflected in the time spent at the place stayed longest in the previous year. Twenty one percent of the EAU sample had stayed in this place for six months or less compared to just three percent for the IMC sample (see Table 9). By contrast, 89 percent of the IMC sample had lived at this place for more than one year compared to just 51 percent for the EAU sample.

Mobility varies substantially depending on whether the place stayed longest during the past year was the family's own place or was a place where the family was a secondary tenant. Just nine percent of families in the EAU sample had spent under six months at the place where they stayed longest last year if they were primary tenants at this place while twenty nine percent of the EAU families who had lived with others had spent six months or less at this place (see Table 10).

Why did families leave the place where they spent the most time in the previous year? For the EAU sample, a majority (54 percent) of those who left did so due to problems associated with the persons with whom they shared an apartment (see Table 11). Evictions accounted for 18 percent of moves and other rent or landlord related problems account for 7 percent of moves.

Table 8

NUMBER OF RESIDENCES IN PAST YEAR AND PAST THREE YEARS

NO. OF RESIDENCES	IN PAST YEAR EAU	IN PAST YEAR IMC	IN PAST 3 YEARS EAU	IN PAST 3 YEARS IMC
1	42%	86%	22%	71%
2 or 3	38%	12%	44%	23%
4 or more	18%	2%	32%	5%
Mean	2.8	1.2	4.0	1.6

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Table 9

TENURE AT PLACE STAYED THE LONGEST LAST YEAR: EAU SAMPLE RELATIVE TO IMC SAMPLE

	EAU	IMC
6 Months or Less	21%	3%
7 - 12 Months	28%	8%
1 Year	18%	12%
2 or 3 Years	14%	22%
4 or More Years	19%	55%

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Just 72 of the 524 IMC families (14 percent) moved from the place they stayed at longest during the past year. This small subset reports building related problems (e.g., sale or condemnation) as the most frequent cause for moving (30 percent) followed by problems associated with persons with whom they had shared an apartment (23 percent). Nine of the 72 families (13 percent) moved because they found a better apartment.

A series of characteristics describing the place stayed at the longest in the previous year are reported in Table 12. The IMC sample relative to the EAU sample is more likely to have:

* lived in rent controlled apartments (49% vs 34%),
* lived in "projects" (16% vs 3%),
* lived in section 8 housing (8% vs 3%), and
* lived in city-owned housing (13% vs 8%).

The EAU sample is much more likely to have lived under crowded conditions with 22 percent of the sample having four or more persons sharing a bedroom. In addition, a total of 52 percent of the EAU sample reports living with other people while just 19 percent of the IMC families live with others (we exclude spouses and boyfriends when determining a doubled up arrangement). Table 13 explores what it is about being doubled up that is associated with high risk of homelessness. There are two possibilities: lack of control due to being a secondary tenant or crowding per se (one potential impact of crowding is

Table 10

TENURE AT PLACE STAYED THE LONGEST LAST YEAR: PRIMARY TENANTS RELATIVE TO SECONDARY TENANTS

	EAU Sample		IMC Sample	
	Primary Tenants	Lived With Others	Primary Tenants	Lived With Others
6 Months or Less	9%	29%	1%	12%
7 - 12 Months	21%	31%	6%	22%
1 Year	20%	17%	13%	9%
2 or 3 Years	25%	8%	22%	17%
4 or More Years	25%	16%	58%	40%

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Table 11

REASONS FOR LEAVING THE PLACE STAYED AT LONGEST LAST YEAR

	EAU Sample	IMC Sample
Eviction		
Rent Related	11%	3%
Not Rent Related	7%	3%
Other Reasons Related to Rent or Landlord	7%	7%
Problems With Persons Who Share Apt.	54%	23%
Problems With Apt. Bldg. (e.g., fire)	10%	30%
All Other	12%	33%

NOTE: This question was not answered by 19 EAU families because they resided in institutions or shelters. In addition, 452 IMC families did not answer because they still resided at the place referred to. Percentages are based on those who answered only.

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Table 12

CHARACTERISTICS OF PLACE STAYED AT THE LONGEST IN PAST 12 MONTHS

	EAU	IMC
Crowding:		
1 Person Per Bedroom	17%	30%
2 or 3 Persons Per Bedroom	61%	62%
4 or More Person Per Bedroom	22%	8%
Paying rent greater than $300	48%	46%
Living in rent controlled apts.	34%	49%
Living in "projects"	3%	16%
Living in Section 8 Housing	3%	8%
Living in city owned housing	8%	13%
Living with others (doubled-up)	52%	19%

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

increased risk of eviction). The analysis reported in Table 13 separates the incidence of being doubled up for families who are primary tenants and families who are secondary tenants.

The findings clearly indicate that it is lack of control rather than crowding per se that is associated with high risk of shelter use. EAU families which are primary tenants are not substantially more likely to be doubled up than are IMC families which are primary tenants (12 percent vs 11 percent). Thus being doubled up does not seem to increase risk of shelter use for those families which are primary tenants.

The same type of result occurs for the crowding variable. For primary tenants, the EAU sample and the IMC sample have similar percentages of families (36 percent vs 25 percent) that have three or more people sharing a bedroom. Both the findings for the doubled up factor and the crowding factor indicate that once one holds constant the impact of being a secondary tenant, the independent influences of crowding do not appear to be strongly associated with shelter use. Being doubled up is associated with future risk of homelessness due to the lack of control associated with being a secondary tenant.

Figure 1 summarizes the information we have about how many families are doubled up at some point in time. For the EAU sample, 69 percent were doubled up the evening before seeking emergency housing, 52 percent were doubled up at the place where

Table 13

SELECTED HOUSING CHARACTERISTICS FOR PRIMARY TENANTS AND SECONDARY TENANTS

	EAU	IMC
% of Families Living With Others At Place Stayed Longest Last Year:		
Complete Samples	52%	19%
For Those With Own Place	12%	11%
For Those Living With Others	75%	64%
% of Families Having Three or More Persons Sharing Each Bedroom:		
Complete Samples	53%	26%
For Those With Own Place	36%	25%
For Those Living With Others	53%	32%

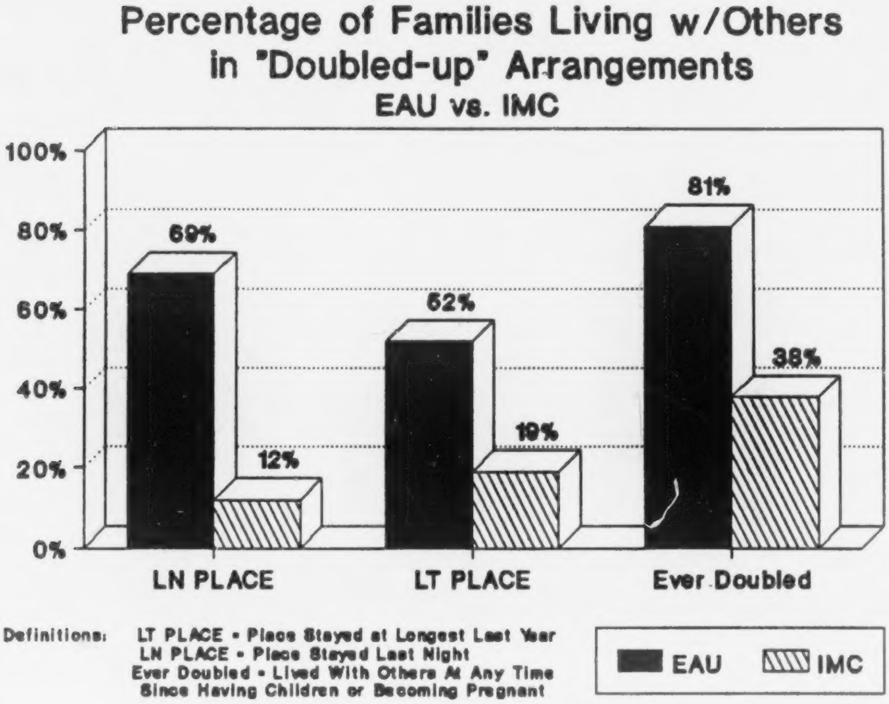
Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

they stayed longest during the previous year, and 81 percent reported that they had been doubled up for at least some time since they had children or became pregnant.

Last Place Where the Family Was the Primary Tenant. In an important sense, homelessness is defined not by shelter use but by not having one's own place to live. It is very possible that the most effective policies to prevent homelessness would focus on keeping people in apartments or houses where they were last the primary tenant. To better understand the characteristics of these last own places and reasons why families left these places, the survey included a set of questions focusing on this aspect of residential history.

The last own place is defined as the place where the family stayed longest last year if they were a primary tenant. For families which were secondary tenants at the place where they stayed the longest last year, we identified the last place where they were primary tenants and where they had lived for at least one year. As reported in Table 2, we found that for the EAU sample, 44 percent had never had their own place where they stayed for at least a year since they became pregnant or had a child, 18 percent had an own place where they stayed for a year at some point in the past but not last year, and 37 percent of the sample were primary tenants at the place where they stayed longest last year. The comparable percentages for the IMC

Figure 1



Percentage of Families Living w/Others in "Doubled-up" Arrangements

EAU vs. IMC

Definitions:
LT PLACE = Place Stayed at Longest Last Year
LN PLACE = Place Stayed Last Night
Ever Doubled = Lived With Others At Any Time Since Having Children or Becoming Pregnant

samples are 12 percent, 2 percent, and 86 percent.

In assessing characteristics of the last place where a person was a primary tenant, we exclude the 45 percent of the EAU sample and the 12 percent of the IMC sample which never have had a place of their own to live. For those who have had their own place, we found that 64 percent of the EAU sample had left within the past six months and an additional 7 percent left between six and twelve months ago (see Table 14). Among the IMC sample, by contrast, most families are still at their last own place, and just four percent left within six months of the interview.

Thirty six percent of the EAU sample families which have had an own place left it due to eviction and an additional nine percent left due to problems paying the rent and landlord harassment (see Table 15). These percentages are somewhat higher than those of the IMC families but not strikingly so. Surprisingly, a substantial number of both EAU and IMC families report that problems with persons sharing the residence was the reason for leaving. These problems could include problems with boyfriends or spouses, however.

Table 16 compares a series of housing characteristics for the EAU and IMC samples. The EAU sample is slightly more likely to live under crowded conditions, and are less likely to pay rents above $300 per month. The EAU sample is substantially less likely to live in projects or section 8 housing but somewhat more

Table 14

TIME SINCE BEING A PRIMARY TENANT

	EAU	IMC
Never have had own place[1]	45%	12%
Have had own place	55%	88%
Stayed at own place last night[2]	2%	92%
Left own place: in past 6 months	64%	4%
in past 7-12 months	7%	1%
in past 13-24 months	9%	1%
in past 25-48 months	7%	1%
in past 49+ months	11%	1%

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

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[1] This category includes a few families which had an own place some time in the past but who did not live there for one year or longer.

[2] This category only includes families which stayed in their own place last night and for whom this is the same place where they spent the most time last year.

Table 15

REASONS FOR LEAVING LAST PLACE WHERE FAMILY WAS PRIMARY TENANT

	EAU	IMC
Eviction		
Rent Related	24%	15%
Not Rent Related	12%	8%
Other Reasons Related to Rent or Landlord	9%	7%
Problems With Persons Who Share Apt.	21%	37%
Problems With Apt. Bldg. (e.g., fire)	23%	37%
All Other	11%	22%

NOTE: This information refers only to the sample which once were primary tenants and who left this residence. Sample size is 394 for EAU sample and 34 for IMC sample.

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Table 16

CHARACTERISTICS OF LAST PLACE WHERE FAMILY WAS PRIMARY TENANT

	EAU	IMC
Crowding:		
1 person per bedroom	42%	55%
2 or 3 persons per bedroom	49%	43%
4 or more persons per bedroom	9%	2%
Paying rent greater than $300	34%	46%
Living in rent controlled apts.	61%	56%
Living in "projects"	5%	19%
Living in Section 8 housing	5%	10%
Living in city owned housing	13%	14%
Living with others (doubled-up)		

NOTE: This information refers only to the 55 percent of EAU families and the 88 percent of IMC families which ever had a place of their own.

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

likely to live in rent controlled apartments. The differences across the two samples in the characteristics of the last place where they were primary tenants are somewhat smaller than were found (in Table 12) for characteristics of the place lived at for the most time in the previous year.

Long Run Experience With Housing Arrangements. In addition to questions about specific places lived in the past, the survey included a series of questions that asked if the family had ever experienced certain housing-related events since the family was formed. For example, 31 percent of the EAU sample report that they have been behind on their rent for two or more months at some point in the past (see Figure 2). This percentage is greater than that for the IMC sample (24 percent), but not substantially so. For both samples, the loss of public assistance benefits is reported as a major reason for falling behind on rent; 32 percent of the EAU sample and 33 percent of the IMC sample had lost their benefits just prior to falling behind on rents.

Earlier tables report that the EAU sample was significantly more likely to have been evicted from each of the three places of residence analyzed. Figure 3 indicates that in aggregate 28 percent of the EAU sample compared to just 7 percent of the IMC sample have ever been evicted from a place of residence. In interpreting this variable and our other eviction information, it

Figure 2

Percentage of Families Behind on Rent
EAU vs. IMC

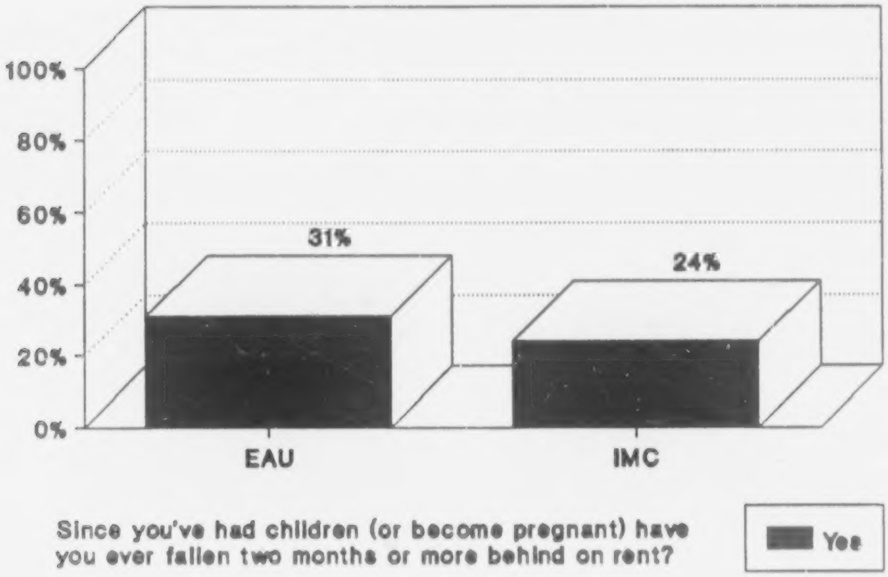
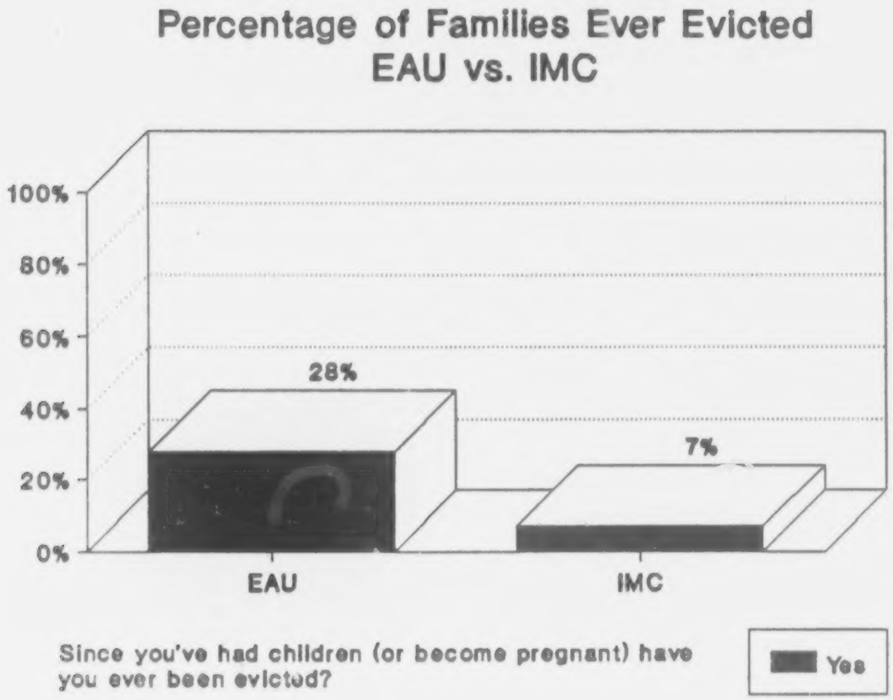


Figure 3


Percentage of Families Ever Evicted
EAU vs. IMC
100%
80%
60%
40%
20%
0%
28%
7%
EAU
IMC
Since you've had children (or become pregnant) have you ever been evicted?
▇ Yes

is important to recognize that the data are self reported and some sample members probably consider evictions to include informal evictions by family or friends and informal evictions of a secondary tenant by landlords.

We also asked whether families who had gone to court to prevent an eviction were represented by a lawyer or not. Among both the EAU and IMC samples, just 49 families had been represented in court by lawyers while 103 families had represented themselves in court. Were outcomes different? The findings, at least for this small sample, indicate almost identical success rates in fighting an eviction whether one has a lawyer (35 percent of these 49 families avoided evictions) or does not have a lawyer (37 percent of these 103 families avoided evictions).

The final type of housing information measures whether each family ever experienced a series of problems often associated with sub-standard housing or fragile housing arrangements. The sample was asked if they ever:

* lived in a residence that had been closed or condemned,
* been forced to leave a residence due to fire,
* not had heat for a week or more during winter,
* not had running water for a week or more,
* lived in a place that was unsafe due to crime or drugs, or
* lived in a place with rats.

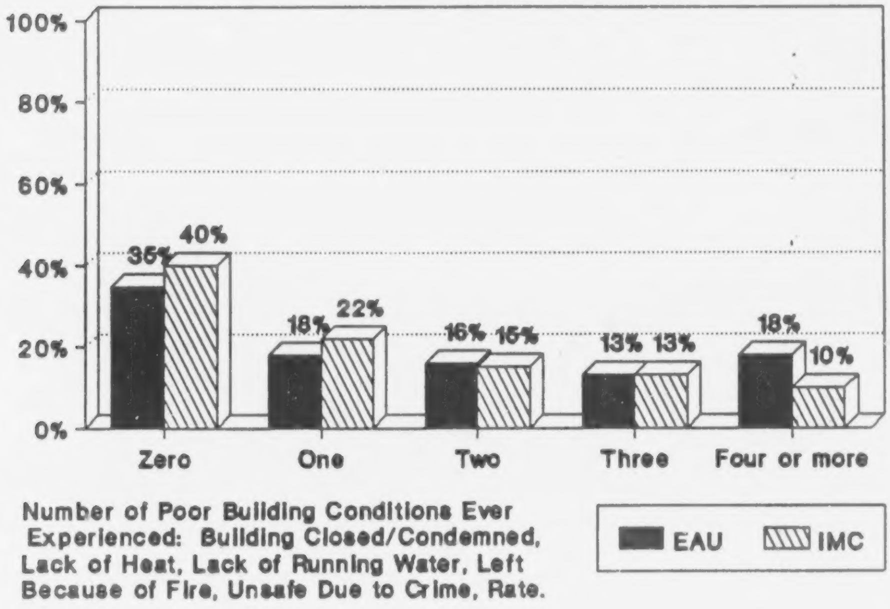
Table 17

INCIDENCE OF HOUSING - RELATED PROBLEMS AT LAST PLACE WHERE FAMILY WAS PRIMARY TENANT

	EAU	IMC
Residence Closed or Condemned	9%	6%
Forced to Leave Due to Fire	13%	13%
No Heat for a Week or More	38%	29%
No Running Water for a Week or More	19%	14%
Live in a Place Unsafe Due to Crime or Drugs	43%	29%
Live in a Place With Rats	46%	42%

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Figure 4



Index of Poor Building Conditions
EAU vs. IMC

Number of Poor Building Conditions Ever Experienced: Building Closed/Condemned, Lack of Heat, Lack of Running Water, Left Because of Fire, Unsafe Due to Crime, Rats.

In the case of each question, the EAU sample reported at least as high incidence of the problem as the IMC sample (see Table 17). The largest difference was the percentage living in a place unsafe due to crime or drugs. Figure 4 charts an index of building conditions that is a count of the number of problems experienced by a family. Eighteen percent of the EAU sample had four or more problems compared to ten percent for the IMC sample.

Discussion

The findings provide substantial new information about the housing experiences of both the population seeking emergency housing and the general public assistance population. Although the ultimate purpose of these data is to improve the City's capacity to forecast which public assistance families are at high risk of becoming homeless, the survey information also provides a detailed description of exactly what housing problems face the two populations.

Even though the Income Maintenance Center sample is not the main focus of this study, important new information emerges about these families:

* Seven percent of public assistance families have used a city shelter in the past with three percent using shelters within the past year.
* Nineteen percent of all public assistance families are doubled up with other families, with twelve percent being secondary tenants and seven percent serving as hosts to other individuals or families.

- Twelve percent of public assistance families have never had their own place to live.
- Seven percent of public assistance families have been evicted at some time in the past with approximately one percent of these evictions coming last year.
- Eighty six percent of public assistance families have not moved in the past year and seventy two percent have not moved in the past three years.
- Twenty four percent of the public assistance families have fallen at least two months behind on their rent at some point in time, and their benefits had been terminated just prior to falling behind in one out of every three of the cases.

Given the richness of the survey data set, this new information tends to get submerged in the comparative analysis that is the focus of this report. It should be recognized, however, that the data for the comparison group represent a useful set of information on a relatively large sample of the general population of public assistance families.

Turning to the EAU sample, a first key finding that guides much of the interpretation of our data is that just 37 percent of the families were primary tenants at the place where they stayed longest last year, and 45 percent of the families seeking emergency housing had never been primary tenants.

In some ways these percentages are striking in that they reflect the large amount of doubling up that precedes requests for emergency housing. The percentages, however, also indicate that a substantial share of the homeless families did have their own place to live in the previous year. It is likely that the pathways and causes of homelessness for these two groups will be different. The predictors of homelessness for former primary tenants and for families with histories of being doubled up could be distinct.

The data presented in Table 13 begin to document what it is about being doubled up that seems to put families at high risk of becoming homeless. The analysis indicates that families who are primary tenants but are doubled up because they are hosting other individuals or families do not seem to be at increased risks of homelessness. Both the EAU and IMC samples have similar percentages of such "host" families. The pattern of findings suggests that it is not the crowding aspect of being doubled up in and of itself that matters; the key factor seems to be lack of control over the housing unit when a person is a secondary tenant.

Another key finding is the evidence that few families move directly from a place where they have spent a long period of time to the city shelters. The survey indicates that just four percent of families come to the EAUs directly from the place where they stayed for the longest time in the past year. We find that 62 percent of the EAU sample had been spent less than one month at the place they stayed the night before seeking shelter. The mobility of families just prior to seeking emergency housing characterizes both former primary tenants and former secondary tenants. The pathways to homelessness generally include a period of trying less and less viable housing options outside the shelter system before coming to the EAUs.

In thinking about prevention strategies, it makes sense to focus on factors leading people to leave their last stable residence and on characteristics of this residence. We found that eviction, inability to keep up with rent payments, and landlord harassment accounted for a quarter of the reasons reported for leaving the place stayed at for the longest period in the last year. Problems with a doubled up arrangement accounted for just over half of the reasons for leaving the place reported by EAU families. Again, strategies for preventing homelessness could vary substantially for these two subgroups of shelter requesters.

In analyzing housing characteristics of the EAU and IMC samples, differences were not striking. However, the IMC sample consistently reported more favorable characteristics than the EAU sample, both relating to the place stayed last year and the last place where the family was a primary tenant.

A final finding to highlight is that a substantial share (31 percent) of our EAU sample had used the City shelter system in the past. This finding was somewhat unexpected since we restricted our sample to those families who had not requested shelter within thirty one days of the interview. This sampling criterion, which we adopted in order to focus on families which were beginning a "new" episode of shelter use, was the overwhelming reason that of 6,526 families screened by interviewers between January and June, just 972 (15 percent) were eligible for our sampling frame.

Most of the families at an EAU on any given evening have been in a shelter within 30 days, but even among those families who are beginning a new episode of homelessness in that they have been out of the system for 30 days, we find that a substantial share are former shelter users. It is likely that the factors predicting re-use of the shelter system and potential preventive measures for repeat users will be distinct from those that apply to first time users of shelters.

Implications for Policy

The findings imply the existence of a number of distinct pathways to homelessness. Some of the EAU families have very different housing experiences than others, and probably need different types of help if they are to avoid homelessness. As with so many other social problems in a complex and large city like New York, we find that the homeless families problem is probably not one problem but a series of distinct problems facing distinct categories of families. We pursue the analysis of pathways to homelessness later in the report where we identify distinct types of families that comprise the total homeless families population.

The implications of this descriptive analysis for developing a forecasting capacity seem to focus on at least four important housing-related risk factors among the housing characteristics considered:

- Not being a primary tenant,
- Not having lived at a given place for a long period of time,
- Leaving a residence before spending one year at the place (one measure of mobility),
- Having experienced previous shelter use.

For each of these factors, the EAU sample includes a relatively high percentage of families with the factor while the IMC sample includes many fewer families with the factor. There are other housing factors that distinguish the EAU and IMC samples in statistically significant ways, but for most of these factors the IMC sample does include a substantial share of families with the characteristic. Thus, at least in a univariate sense, many of these factors would not be good targeting variables.

Pregnancy and Parenting Factors
Summary

Pregnancy and recent childbearing may be among the most salient issues in understanding current utilization of New York City's family shelters. Current pregnancies and recent births exhibit a strong relationship to entry into the shelter system. In contrast, teen motherhood and large family size have only a small impact on risk of homelessness.

Among those who were homeless, 35 percent indicated that they were pregnant at the time of the interview, as compared with six percent of those who were housed. Similarly, 26 percent of the homeless stated that they had given birth in the past year as compared with 11 percent of those who were housed. The age compositions of the homeless and housed groups do not account for the dramatic differences in fertility.

Whereas the recent addition of a child increases a family's risk of homelessness, the relationship of family size and total number of children to homelessness is far less clear cut. Within all but one of the age groups, homeless women indicate that they have had slightly more children than their housed counterparts. But the homeless also indicate that fewer children under 18 are currently living with them.

Overall, younger women were more likely to indicate that they had been teen mothers; nearly half of those under age 25 had been teen mothers. But in all but the oldest age group, teen motherhood is more typical among the homeless population than the housed. However, since the differences between the homeless and housed groups are far from enormous, it would appear that a history of teen motherhood contributes only marginally to a family's degree of risk.

Clearly, there is a relationship between pregnancy and recent births, and requests for emergency housing. However, the exact nature of this relationship remains unclear. Policies, at the time of study, which favored pregnant women and new mothers in the shelter system may have encouraged greater shelter use among this group. The strains of an infant may make an already difficult housing situation untenable. Or pregnancy may be a correlate of the pre-shelter situation.

Regardless of the underlying causal relationship between pregnancy, childbirth and homelessness, the implications for service delivery are enormous. The problems and needs of women who are pregnant or who are caring for newborns are distinct from those faced by other mothers. The burden faced by the city in trying to provide these families with adequate emergency shelter is especially great.

IV. PREGNANCY AND PARENTING FACTORS

Background

Many studies have documented the strong correlation of early pregnancy with female poverty (Children's Defense Fund, Teenage Pregnancy: An Advocate's Guide to the Numbers, 1988 and F.L. Mott and N.L. Maxwell, "School-Age Mothers: 1968 and 1979," Family Planning Perspectives, 13:287, 1981). Similarly, women who gave birth as teenagers are far more likely to be receiving public assistance than are those who delayed their first birth (J.B. Wilson, "Women and Poverty: A Demographic Overview," in C. Perales and L. Young, eds., Women, Health and Poverty, The Haworth Press, New York, 1988). However, it does not appear that teenage pregnancy has a direct effect on either poverty or welfare dependence. Rather, early childbearing is associated with low educational attainment and increased family size, which in turn increase the risk of poverty or welfare dependence (K.A. Moor et al., Teenage Motherhood: Social and Economic Consequences, The Urban Institute, Washington, D.C., 1979).

Despite the problems faced by many young women as a result of early motherhood and large family size, there has been surprisingly little attention given to the role played by pregnancy and family size in placing families at risk of homelessness. For instance, women who were teenage mothers might have a hard time finding housing initially. Furthermore, the economic, physical and emotional stress of additional pregnancies might add to the risk of homelessness faced by poor women, and the difficulties inherent in finding affordable housing are multiplied for large families.

Findings

The study's findings indicate that, in fact, pregnancy and recent childbearing may be among the most salient issues in understanding current utilization of New York City's family shelters. Current pregnancies and recent births exhibit a strong relationship to entry into the shelter system. In contrast, teen motherhood and large family size have only a small impact on risk of homelessness.

Among those who were homeless, 35 percent indicated that they were pregnant at the time of the interview, as compared with six percent of those who were housed. Similarly, 26 percent of the homeless stated that they had given birth in the past year as compared with 11 percent of those who were housed. In comparison, the United States birth rate for women aged 20 through 29 is approximately 11 percent.

Since the homeless mothers are somewhat younger than those housed, there is the possibility that the higher rates of fertility associated with the homeless are a function of age. The age compositions of the homeless and housed groups do not, however, account for the dramatic differences in fertility (see

Figure 5

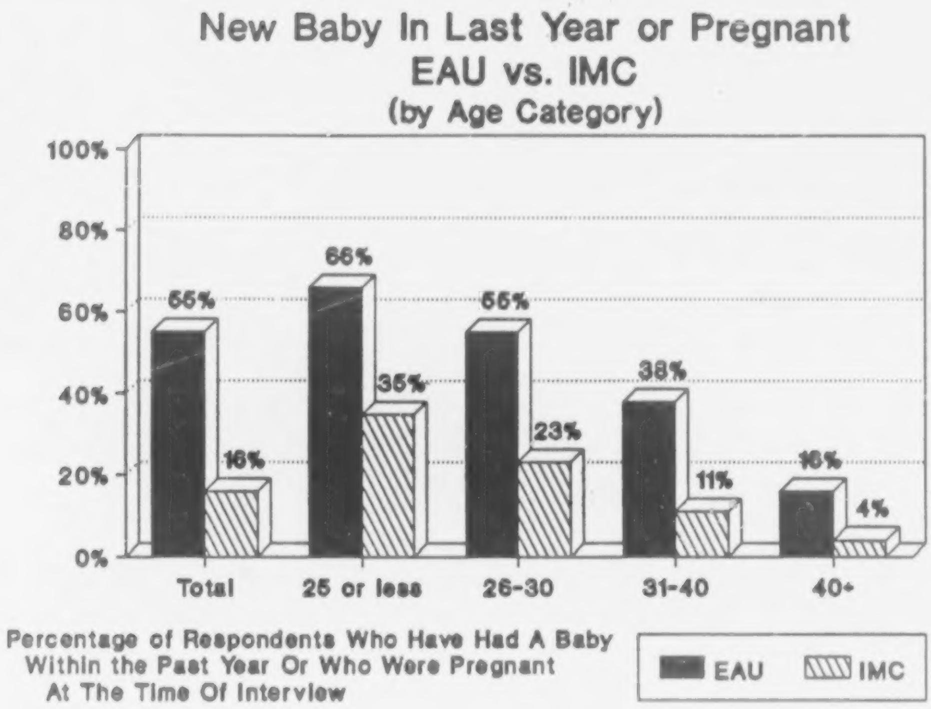
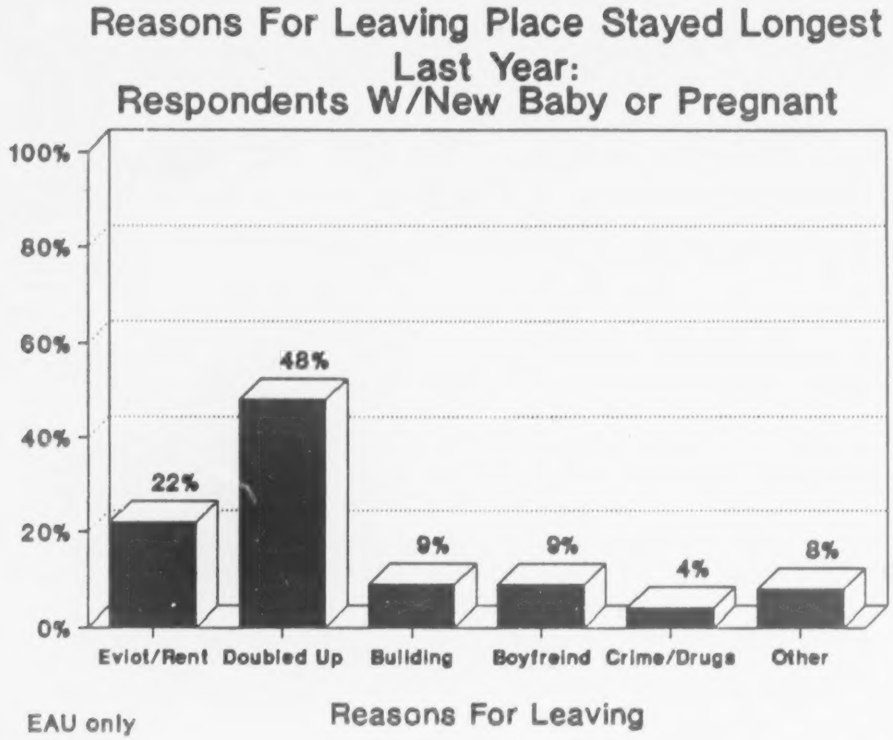

New Baby In Last Year or Pregnant
EAU vs. IMC
(by Age Category)
100%
80%
60%
40%
20%
0%
55%
16%
66%
35%
55%
23%
38%
11%
16%
4%
Total
25 or less
26-30
31-40
40+
Percentage of Respondents Who Have Had A Baby
Within the Past Year Or Who Were Pregnant
At The Time Of Interview
EAU
IMC

Figure 5). Among those aged 18 through 25, an overwhelming 66 percent of the homeless sample were either currently pregnant or had recently given birth. For those who were housed, this is a much smaller 35 percent. Regardless of age group, those entering emergency shelter are far more likely to be either pregnant or to have new babies.

To understand the underlying causes for why pregnant women and new mothers may be at increased risk of homelessness, it may be useful to examine the reasons why these women entered the shelter system. Surprisingly, pregnant women and those with new babies enter the shelters for roughly the same reasons as other homeless mothers. Problems associated with being doubled up (i.e., living in somebody else's apartment) were the most frequently cited reasons for leaving the place they had stayed the night before requesting shelter and for leaving the place they had stayed the longest period of time last year (see Figures 6A and 6B). Formal and informal evictions and problems with rent payment also were precipitants of homelessness within this group. Although having a new baby or being pregnant does appear to be related to homelessness, it does not seem that these families become homeless for reasons that are peculiar to childbirth.

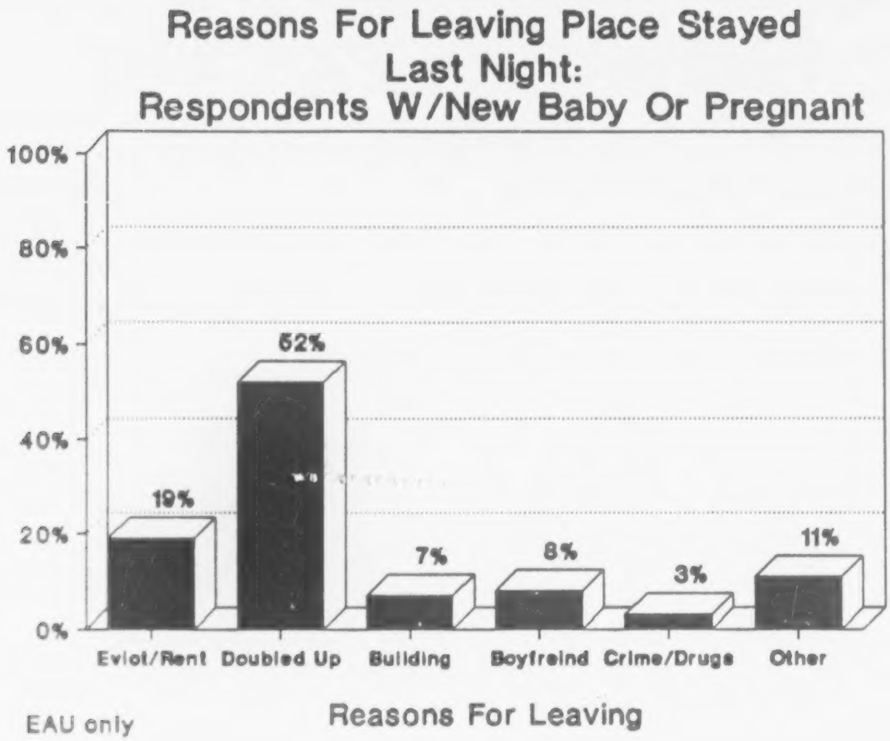
Those mothers who have recently given birth or who are currently pregnant are, in fact, more similar to other homeless mothers than they are different. No statistically significant

Figure 6a



Reasons For Leaving Place Stayed Longest Last Year: Respondents W/New Baby or Pregnant

Figure 6b



EAU only

differences were found between these two groups in regard to: teen motherhood, utilization of well-child exams, full-time work history, race, health problems or number of moves in the past year and past three years. As already noted, the pregnant and new mothers were younger than the other homeless mothers. The homeless women who were pregnant or new mothers were somewhat more likely than their homeless counterparts to have experienced serious disruption (e.g., foster care) while growing up. Furthermore, pregnant women and those with new babies were less likely to have ever been the primary tenant.

Whereas the recent addition of a child increases a family's risk of homelessness, the relationship of family size and total number of children to homelessness is far less clear cut. Within all but one of the age groups, homeless and housed women indicate that they have had the same number of children. But the homeless also indicate that fewer children under 18 are currently living with them (see Table 18). Responses from women aged 26 through 30 are used to illustrate this point. When asked, "How many children have you had?," homeless and housed women in this age group reported having had a mean of 2.3 children. However, when asked, "how many children under eighteen are staying with you right now?," these mothers reported having a mean of 1.8 children with them if they were homeless and 2.2 if they were housed. Current family size for homeless women is much smaller

Table 18

FAMILY SIZE BY AGE GROUP: EAU SAMPLE RELATIVE TO IMC SAMPLE

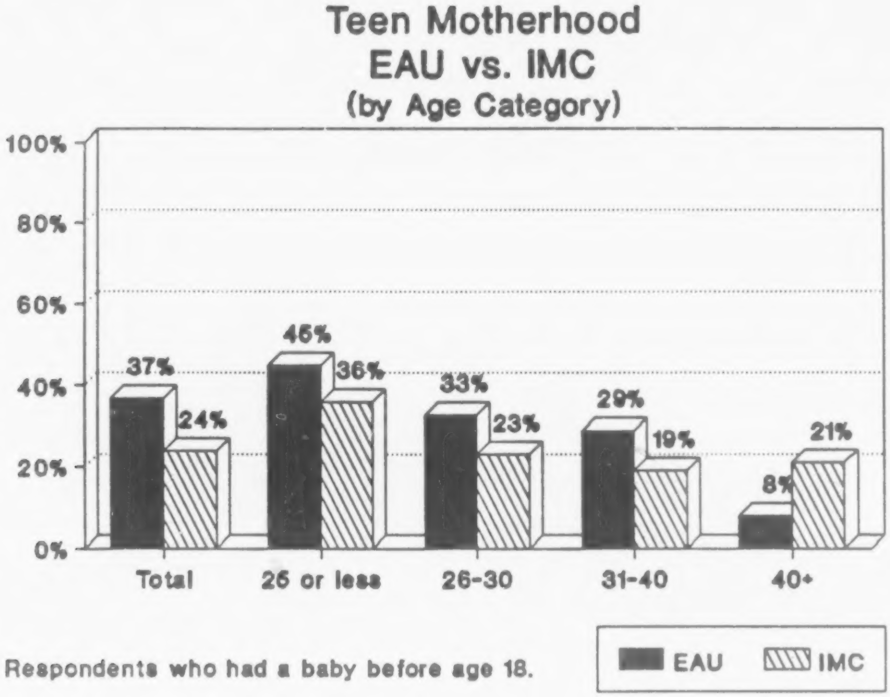
Respondent's Age Group	Number of children ever had		Number of children <18 currently with	
	EAU	IMC	EAU	IMC
25 or less	1.6	1.6	1.4	1.6
26-30	2.3	2.3	1.8	2.2
31-40	2.8	2.7	1.8	2.3
40+	3.2	3.9	2.0	1.4

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

than what would be expected based on number of children born to or adopted by the mother (since a mother under the age of 30 is unlikely to have children over age 18). However, only two percent of the homeless families indicated that a child age 17 or under had left their family in the past year, as compared with one percent of the housed. Considering these factors, overall, it does not appear that one can readily support the hypothesis that large family size has a direct impact on risk for homelessness.

Almost one-third of all the women interviewed had been teenage mothers. (This proportion is substantially less than the national estimate among recipients of public assistance--almost 60 percent had been adolescent mothers (J.B. Wilson, "Women and Poverty: A Demographic Overview," in C. Perales and L. Young, eds., Women, Health and Poverty, The Haworth Press, New York, 1988). As Figure 7 shows, homeless mothers in all age-groups except those older than 40 were more likely to have given birth before age 18 than were their housed counterparts. Overall, younger women were more likely to indicate that they had been teenage mother: Nearly half of the homeless, and over one-third of the housed under age 25 had had a child by age 18. These proportions are considerably lower among women in both samples who were over 40 at the time of interview. And although only small differences were found between black and Hispanic women in

Figure 7



Respondents who had a baby before age 18.

regard to teenage motherhood, the relative risk of homelessness among mothers who had children as teenagers was more pronounced among Hispanics.

Discussion

Clearly, there is a dramatic relationship between pregnancy and recent births, and requests for emergency housing. However, the exact nature of this relationship remains unclear. As a result of judicial decisions and state policies, New York City's emergency housing policy at the time of this study favored pregnant women and those with infants. (Such policies are currently in flux and some of the extra services described are no longer targeted to pregnant women and new mothers.) Pregnant women and new mothers had to be placed in private rooms; that is, they could not be placed in congregate facilities where many families sleep in one large area. Also, pregnant women and new mothers were eligible for assistance in finding permanent housing at an earlier point than other homeless women. Some argue that these policies provided greater incentive (or, at least, reduced some of the disincentive) for pregnant women and new mothers to enter emergency housing. Within this framework, pregnant women living in difficult housing situations (e.g., crowded or doubled up families) were more likely to leave these situations for emergency housing knowing that they would not be placed in a congregate facility.

Another possible explanation for the differences between the housed and homeless populations in terms of pregnancy and childbirth focuses on the strains placed on the family unit by these experiences. Difficult housing situations, which are typical for the poor in New York City's limited low income rental market, are made even more untenable by pregnancy or the presence of a newborn child. Crowded conditions become more crowded, the need for heat or hot water becomes more critical, and crime becomes more frightening. Pregnant women or new mothers are thus encouraged to seek emergency housing. This scenario is especially noteworthy since relatively few of these women have ever been primary tenants in an individual household.

It is also possible that pregnancy or new motherhood does not actually precipice homelessness so much as it is a correlate of a range of characteristics associated with families on the verge of becoming homeless. That is, perhaps one does not lead to the other; rather, pregnancy may simply be more likely for women experiencing a range of problems and conditions typical of the "pre-emergency housing period." Further analyses may help clarify this relationship. However, it is worth stressing that in regard to a broad range of factors the pregnant and new mothers do not look terribly different from other homeless women.

Although pregnancy and recent births are related to homelessness, it does not appear that homelessness is the result of increased family size, per se. Neither the number of children born nor current family size is, in and of itself, a good predictor of risk. Neither factor readily distinguishes the housed poor from the homeless. It therefore seems unlikely that the lack of large, low rent apartments, as compared with smaller apartments, is a direct cause of significant amounts of homelessness. Although housed and homeless women reported having had the same number of children, the homeless have fewer of their children currently living with them. Even for those mothers under age 30, for whom children over age 18 are highly unlikely, homeless mothers have smaller families than would be expected based on number of children born. This finding potentially lends support to the idea that the homeless "give up" (voluntarily or by force) some of their children during the difficult time prior to shelter entry; however, we must also remember that only two percent of the homeless indicated that a minor child had left their household during the past year.

Teen motherhood is associated with an increased likelihood of homelessness among welfare families. But these findings are not nearly so dramatic as for current pregnancies and births. It is likely that teen motherhood is one of a constellation of factors that places barriers in the way of financial independence. It is reasonable to expect that the impact of teen motherhood would be greatest when a woman is young and that its effect would subside over time. Interestingly, few of the homeless families interviewed are headed by teenagers. This may result from city policies which refer pregnant teens and teen mothers to agencies and facilities specifically targeted to this population.

Implications for Policy

The findings provide ample evidence that birth experiences (current and recent pregnancies and early pregnancies) will need to be factored into any model of risk of homelessness for this population.

Regardless of the underlying causal relationship between pregnancy, childbirth and homelessness, the implications for service delivery are enormous. The problems and needs of women who are pregnant or who are caring for newborns are distinct from those faced by other mothers. For families with infants the lack of privacy, refrigeration and cooking facilities which typify much emergency housing is especially problematic. The burden faced by the city in trying to provide these families with adequate emergency shelter is especially great.

In trying to develop and target preventive services, it is necessary to begin to identify the stressors placed on a poor family by a child's birth. And even more importantly, it is necessary to identify strategies that can help to reduce this stress. Program planners need to recognize that this population may not receive all benefits for which it is entitled (see WIC example in section on "welfare and work"). Furthermore, these families may have experienced significant disruption and fragmentation as a result of or as a correlate of difficult and inadequate housing histories. In trying to address the problems of homeless families and in trying to prevent poor families from becoming homeless, attention must be paid to the family unit and the addition of children to that unit.

Summary
Health, Mental Health, and Substance Abuse

Health and mental health problems are somewhat more prevalent among the homeless than the housed -- especially within age groups -- but only a minority of the homeless are affected by such problems. Families on public assistance are plagued by the types of health problems that typify persons in poverty; asthma, bronchitis, high blood pressure, etc. Among those who are older, such health problems appear to be endemic. Although the issue of health care for the homeless has received substantial attention, it would appear that the health problems of all welfare families need to be addressed.

Mental health problems are a problem for fewer of the families interviewed than are problems of physical health. It is important to stress that this is not a population that one would characterize as mentally ill. Only four percent of the EAU sample and one percent of the IMC sample have spent a night in a mental hospital. Deinstitutionalization policies account for very little, if any, family homelessness.

Substance abuse does appear to be related to homelessness. Within age categories, homeless families were substantially more likely than housed families to suffer from problems resulting from use of drugs and alcohol and to have entered a detoxification or treatment facility. But like other physical and mental health problems, it is a problem for a minority of the homeless families. Although it would appear that substance abuse increases a family's risk of homelessness, it would be highly misleading to present such abuse as the cause of homelessness.

Prior shelter use is correlated with both problems of physical health and mental health, including substance abuse. The interpretation of this finding is difficult. Use of emergency housing may, in fact, pose a risk to the physical and emotional well-being of a family. It is also possible that those families experiencing physical and mental health problems are least likely to extricate themselves from homelessness; they are the families most likely to become repeat users of the system.

V. HEALTH, MENTAL HEALTH, AND SUBSTANCE ABUSE

Background

Of all issues related to homelessness, none has received as much attention as that of health. Studies have been conducted, articles have been written, and commissions have been formed to examine the relationship between health and homelessness. Some have focused on the degree to which poor health, particularly poor mental health, leads to homelessness. Especially among the single adult population, much attention has been paid to the relationship between deinstitutionalization policies and homelessness. Alcoholism and drug addiction have also been explored as risk factors.

Other researchers have looked at the way in which homelessness impacts on an individual's health. Studies of tuberculosis rates among homeless adults and developmental delays among homeless children are examples of this approach. In contrast to this approach, other research has investigated the difficulties encountered in trying to meet the health needs of the homeless. For those engaged in service delivery, evaluations of mobile van units, visiting nurses, and on-site clinics provide information essential to effectively providing needed services to the homeless.

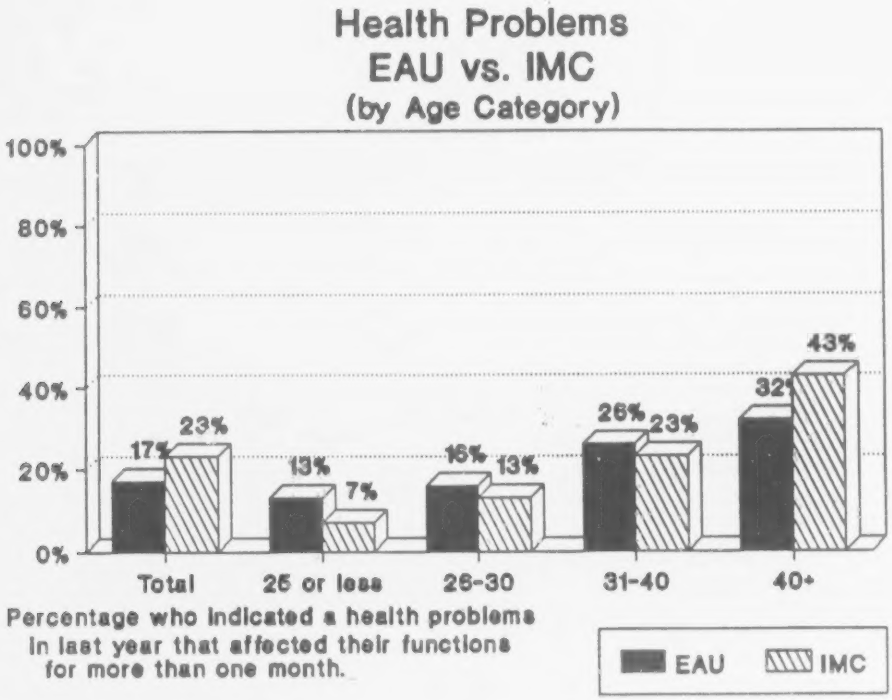
This study provides the opportunity to estimate the prevalence of health and mental health problems among New York City's public assistance families and, particularly, among those seeking emergency shelter. The risk posed by health problems in regard to homelessness is explored. Also, the degree to which the homeless experience may contribute to health problems is also examined.

Findings

A substantial number of persons interviewed reported chronic or long-term health problems. At first glance, it would appear that the homeless suffer from fewer health problems than the housed. When asked, "have you had any health problems in the last year that have affected your ability to do the things you have to do for a period of at least one month?", 18 percent of the homeless respondents and 23 percent of those who were housed said, "yes". Most typical among these problems were asthma and bronchitis, high blood pressure, arthritis, and heart conditions.

Once age is considered, the EAU group no longer looks "healthier" than the IMC sample. Older respondents overall were more likely to indicate that they suffered from health problems; for example, 12 percent of those 25 and under and 42 percent of those over 40 indicated a health problem. The homeless reported fewer health problems than the housed because the homeless are younger. That is, within age categories, a slightly greater percentage of the homeless respondents reported a health problem (see Figure 8). For example, among those age 25 and younger, 13

Figure 8

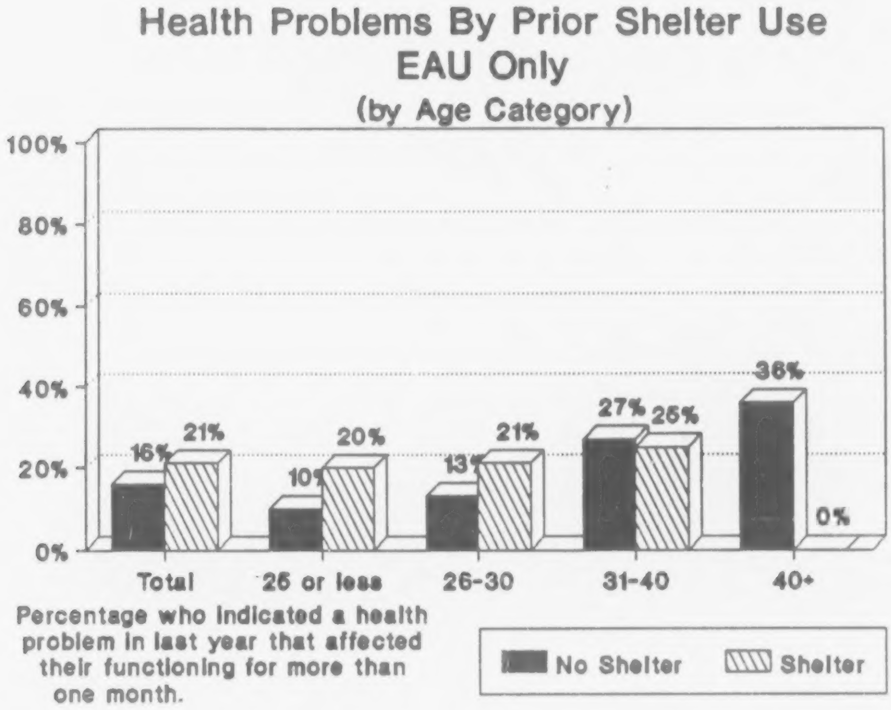

Health Problems
EAU vs. IMC
(by Age Category)
100%
80%
60%
40%
20%
0%
17%
23%
13%
7%
16%
13%
26%
23%
32%
43%
Total
25 or less
26-30
31-40
40+
Percentage who indicated a health problems
in last year that affected their functions
for more than one month.
EAU
IMC

percent of the homeless and 7 percent of the housed indicated a health problem. Of note, within age categories, Hispanics are somewhat more likely, than Blacks to report health problems.

A higher proportion of those who had previously used emergency housing indicated a health problem. This was true of both the EAU and IMC groups, although one must bear in mind that relatively few of the IMC sample reported a shelter stay. Among those currently seeking shelter, 21 percent of the previous shelter users and 16 percent of those new to the system reported a problem. The differences between the new families and repeat shelter users are greatest for the youngest respondents (see Figure 9).

When asked, "Did you have a nervous problem in the last year that has affected your ability to do the things you had to do for a period of at least one month?", 10 percent of the homeless respondents and 16 percent of the housed answered affirmatively. It would appear that most of these cases are serious enough to have warranted medical attention; among the homeless, 16 percent indicated that a doctor had prescribed daily use of tranquilizers or medication for "nerves." Younger respondents were less likely to indicate a nervous problem and differences between the EAU and IMC samples become less clear-cut once age is considered. Among the EAU sample, prior shelter use is associated with somewhat higher rates of nervous problems; 15 percent of previous users

Figure 9


Health Problems By Prior Shelter Use
EAU Only
(by Age Category)
100%
80%
60%
40%
20%
0%
16%
21%
10%
20%
13%
21%
27%
25%
36%
0%
Total
25 or less
26-30
31-40
40+
Percentage who indicated a health problem in last year that affected their functioning for more than one month.
No Shelter
Shelter

reported such problems, as compared with 8 percent of those new to the system.

Although a substantial proportion of both the EAU and IMC samples indicated use of prescription drugs for mental and emotional problems, only a very small number have ever been hospitalized for such problems. Four percent of the EAU sample and one percent of the IMC sample indicated that they had been admitted overnight to a mental hospital. A somewhat larger seven percent of the EAU sample and eight percent of the IMC sample indicated that they had used the services of a therapist or counselor at some time.

Those surveyed were asked, "Do any of your children or other family members have any health or emotional problems that have affected your ability to do the things you have to do for a period of at least one month out of the last six months?" Overall, there were small differences between the homeless and housed in regard to family health; 12 percent of the homeless families and 15 percent of housed families reported family health problems. Within all but one age category, however, the homeless families were more likely to report health problems (see Figure 10).

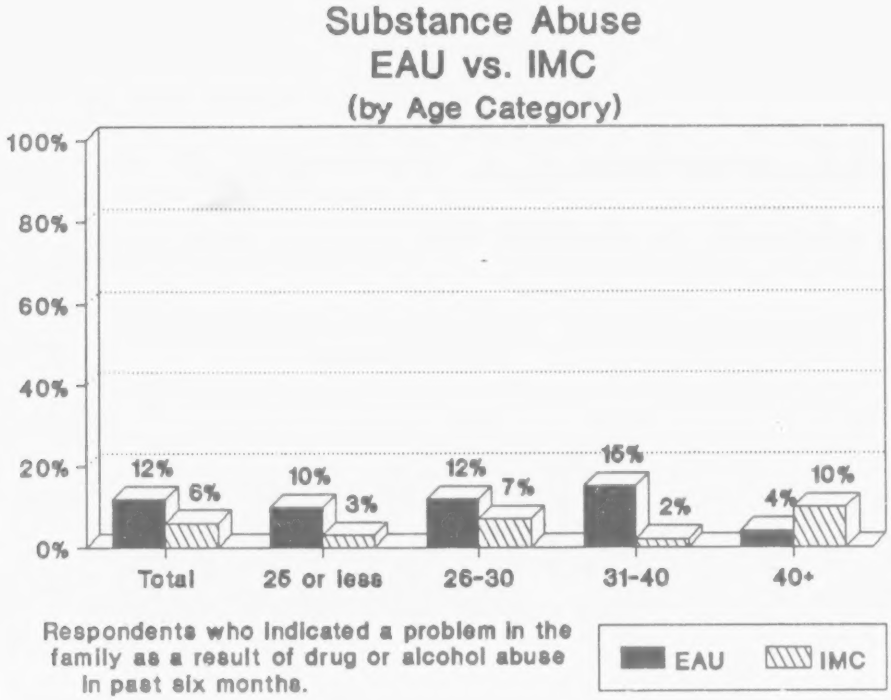
As an indicator of health services utilization, respondents were also asked to indicate if they had taken their youngest child for a well-child examination during the past year.

Among those families seeking shelter, 79 percent said that their youngest child had had a well-child exam. Among the housed families, 73 percent indicated that the youngest child had an exam (see Figure 11). Since those families with younger children are more likely to make use of preventive services, it seemed important to adjust for this fact. In this analysis the age of the parent is used as a proxy for the age of the child. Within age categories, the youngest children from the housed families were slightly more likely to have had a well-child exam than those from the homeless families. Among those families where the responding parent was age 25 or younger, 44 percent of the EAU sample and 60 percent of the IMC sample had taken the youngest child for a check-up.

The study provides evidence that pregnant women and new mothers on public assistance may not be obtaining the full range of benefits for which they are eligible, and that those who become homeless are least likely to obtain them. This has dramatic implications for prenatal health and pregnancy outcomes. When asked if they were enrolled in the WIC (Women, Infants, and Children) program, only 45 percent of the homeless women who were pregnant or had new babies indicated enrollment. A somewhat better 60 percent of those housed women indicated enrollment.

In addition to asking the respondents about their physical and emotional health, questions regarding substance abuse were

Figure 12


Substance Abuse
EAU vs. IMC
(by Age Category)

Respondents who indicated a problem in the family as a result of drug or alcohol abuse in past six months.

also included. The survey asked, "Has use of drugs or alcohol (their own use or that of a friend or family member) affected your ability to do the things you have to do at any time in last six months?". Five percent of the homeless respondents, as compared with one percent of those who were housed, indicated that their own drug or alcohol use posed a problem. Twelve percent of the homeless and six percent of the housed said that use of drugs or alcohol by themselves, family or close friends was problematic (see Figure 12).

Differences between the housed and homeless groups widen when age is considered. For example, among those age 25 and under, 10 percent of the homeless and 3 percent of the housed say that substance abuse -- their own, a family member's, or a friend's -- had caused a problem (see Figure 12). This difference is most dramatic among those aged 31 to 40. In this age category, drug and alcohol use had interfered in the functioning of 15 percent of the homeless families, but only 2 percent of those housed. Race does not seem to be significantly correlated with problems of substance abuse; the proportions of Hispanics and blacks reporting such problems are similar. Within the EAU sample, 12 percent of the black respondents and 11 percent of the Hispanic respondents indicated substance abuse problems.

Within both the EAU and IMC samples, previous shelter use is associated with more substance abuse problems. For those in the

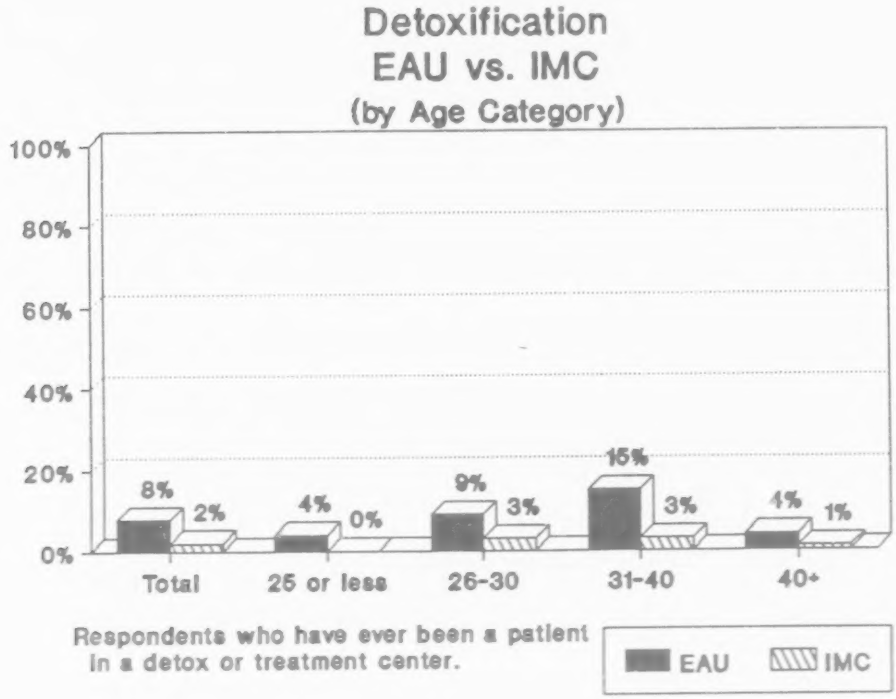
EAU sample who had previously been in emergency housing, 18 percent indicated a problem resulting from drugs or alcohol. Among those not previously sheltered, nine percent stated that substance abuse was a problem.

Among homeless families, eight percent of the respondents had been patients in a detoxification or treatment center. Only two percent of the housed group had been in detox. Differences between the two groups are sustained even when adjusting for age. Treatment for drug or alcohol abuse is most common among those aged 31 to 40; within this age group, 15 percent of the homeless and 3 percent of the housed had been patients in a treatment facility (see Figure 13).

Discussion

Health and mental health problems are somewhat more prevalent among the homeless than the housed -- especially within age groups -- but only a minority of the homeless are affected by such problems. As one would expect, families on public assistance are plagued by the types of health problems that typify persons in poverty; asthma, bronchitis, high blood pressure, etc. Among those who are older, such health problems appear to be endemic. Chronic illness is a way of life for nearly half of the older AFDC recipients. It is, unfortunately, not possible to assess the degree to which health problems lead to reliance on public assistance or the degree to which reliance

Figure 13



Respondents who have ever been a patient in a detox or treatment center.

on public assistance leads to health problems. Either model is quite plausible. Although the issue of health problems of the homeless has received substantial attention, it would appear that the health problems of all welfare families need to be addressed.

The interview questions focused on chronic health problems and acute episodes of substantial length (i.e., more than one month). Therefore, these data do not permit an estimate of the degree that this population is characterized by an unusually high incidence of brief, acute episodes (either illness or trauma). This is especially significant in regard to the children in these families, since childhood illness tends to be more episodic than that of adults. Since 20 percent of the housed and 14 percent of the homeless indicated chronic or long-term health problems among family members -- and in most cases this referred to children -- there is reason to be particularly concerned about the health status of children in these families. These long-term and chronic problems are likely to represent only a small proportion of the illnesses affecting these children. Again, the issue of causality remains confounded. The degree to which Medicaid policy encourages families with serious illness to remain on welfare must also be considered.

Surprisingly, there are not substantial differences between the homeless and housed in regard to well-child exams. It does not appear, based on this data, that the period prior to shelter entry inhibits use of health care services. Again, the limitations of the questionnaire must be noted. It is possible that the housed made more frequent well-child visits or were able to obtain more continuous care for their children. Another question, however, must also be raised. Although there do not appear to be substantial differences between the housed and the homeless, does either group have what would be considered sufficiently high rates of well-child care? Among those parents age 25 and younger, 78 percent of the homeless and 82 percent of the housed had taken their child for a well-child exam in the past year. Given that the great majority of these parents have very young children, are these rates of utilization as high as one might hope or expect?

Clearly, the rates of utilization of the WIC program are cause for concern. Research has demonstrated the effectiveness of this program for reducing the incidence of low-birth weight deliveries and other negative pregnancy outcomes, and yet substantial numbers of women on public assistance are not enrolled.

Mental health problems affect fewer of the families interviewed than do problems of physical health. It is necessary to acknowledge that this study relies on self-reported mental and emotional problems; however, there is little reason to believe that these data suffer from any greater bias than do other measures of such problems. "Nervous" problems, and medication for their treatment, are not uncommon (e.g., 16 percent have prescriptions for daily use of tranquilizers and related drugs) among housed and homeless public assistance families. However, it is important to stress that this is not a population that one would characterize as mentally ill. Only four percent of the EAU sample and one percent of the IMC sample have spent a night in a mental hospital. Deinstitutionalization policies account for very little, if any, family homelessness.

Substance abuse does appear to be related to homelessness. Within age categories, homeless families were substantially more likely than housed families to suffer from problems resulting from use of drugs and alcohol and to have entered a detoxification or treatment facility. But like other physical and mental health problems, it is a problem for a minority of the homeless families. Although it would appear that substance abuse increases a family's risk of homelessness, it would be highly misleading to present such abuse as the cause of homelessness.

Caution must be exercised in the use of self-reported data in regard to substance abuse. The interview focused not on the prevalence of drug use, but rather, the respondents' perception of a drug or alcohol problem. It is especially interesting to note that those age 31 through 40 were most likely to indicate a problem with drugs and alcohol. It is unlikely that abuse of drugs and alcohol is more prevalent among this age group. A more likely interpretation is that this group is more likely than those younger to see drugs and alcohol as a problem to their family functioning. This may also explain why detoxification rates are higher for this age group; one must recognize the problem before entering a detoxification facility.

Prior shelter use is correlated with both problems of physical health and mental health, including substance abuse. The interpretation of this finding is difficult. Use of emergency housing may, in fact, pose a risk to the physical and emotional well-being of a family. It is also possible that those families experiencing physical and mental health problems are least likely to extricate themselves from homelessness; they are the families most likely to become repeat users of the system. Before the relationship between shelter use and health can be truly disentangled, a longitudinal study is necessary.

Implications for Policy

Considerable effort has been aimed at providing health services to the homeless. This study raises questions about the degree to which homeless families are more needy of these services than housed families on public assistance. Both homeless and housed public assistance families face substantial health problems. Whether they are able to meet these needs through existing services is in question. But it is not clear that services targeted at the homeless are the appropriate solution.

Emotional and mental health problems, including substance abuse, are also a significant problem for a considerable number of public assistance families. These data do not indicate a population in need of institutionalization or intensive therapeutic measures. However, other forms of support may be needed. Substance abuse is one area in which the homeless look significantly worse than the housed. Conditions in the shelter system cannot be blamed for the prevalence of abuse problems; the homeless with no prior shelter use look substantially worse in this regard than those who are housed. However, it may be necessary to begin using the shelter stay as a time of intense support and treatment for that small group of families who have reported themselves as having a problem. Repeat shelter use is associated with a greater degree of substance abuse; even if the shelter stay is not contributing to the abuse problem, it is certainly not improving the situation.

Finally, it may be important to remember that health care is only one approach to health problems. Those interviewed suffer from problems of poverty -- chronic health conditions for which medical science has only limited suggestions. The solutions to their medical problems may be more a function of social welfare, education, and employment, then of health services.

Welfare, Employment, and Education
Summary

Both the EAU and IMC samples can be characterized by high rates of multi-generational welfare dependence, poor educational attainment, and poor employment histories. This discovery is neither new or surprising. What is surprising is that these factors are very poor predictors of homelessness. Although having had a parent on welfare does seem to increase one's risk of entering emergency housing, this constellation of welfare and work factors adds little to our understanding of the differences between the housed and homeless poor in New York City. In contrast, frequent administrative closings do help to distinguish those at risk of homelessness.

Overall, more than half of the respondents in the EAUs (and one-third in the IMCs) indicated that one or both of their parents had received public assistance at some point while the respondent was growing up. Although younger respondents were more likely to come from a welfare home, the relationship between shelter use and parents' welfare use is sustained within age groups. Of note, the homeless families were slightly less likely to be on public assistance themselves for a extended period of time (more than five years).

When we examine administrative closings, we find that the homeless are much more likely to have experienced two or more closings (56 percent compared with 28 percent). The causal relationship between housing instability and case closings is unclear.

The level of educational attainment for this population is poor. Sixty percent of the EAU sample and 63 percent of the IMC sample stated that they had completed fewer than 12 years of schooling. However, lack of educational attainment does not appear to be related to risk of homelessness.

Similarly, when age is considered, there are no significant differences between those seeking shelter and those housed in regard to having had full-time work experience. It is worth noting that among those who have worked, the homeless having worked more recently.

To address the problem of welfare dependency, education, work history, and prior family use of public assistance must all be considered. However, to target services to prevent homelessness, variables of education and employment are not of merit. Increased education and job experience do not seem likely to be effective strategies for keeping public assistance families from entering emergency housing. However, trying to better understand the exact relationship between administrative closings and the need for emergency housing could prove fruitful.

VI. WELFARE, EMPLOYMENT, AND EDUCATION

Background

Recent Congressional debate regarding welfare reform has focused on "breaking the cycle" of welfare dependency. Policies on the national, state, and local levels have assumed enrollment in welfare programs, such as AFDC, to result from a lack of employment skills (as indicated by poor educational attainment and limited work histories) and a culturally-based reliance on government programs (as indicated by multi-generational welfare dependence). Yet, little has been done to test these assumptions. This study presents the opportunity to examine these possible antecedents to welfare in regard to homelessness. How prevalent are these conditions among New York City's AFDC families? And, most important to this study, to what degree are educational attainment, employment history, and parents' welfare enrollment predictors of homelessness among a public assistance population?

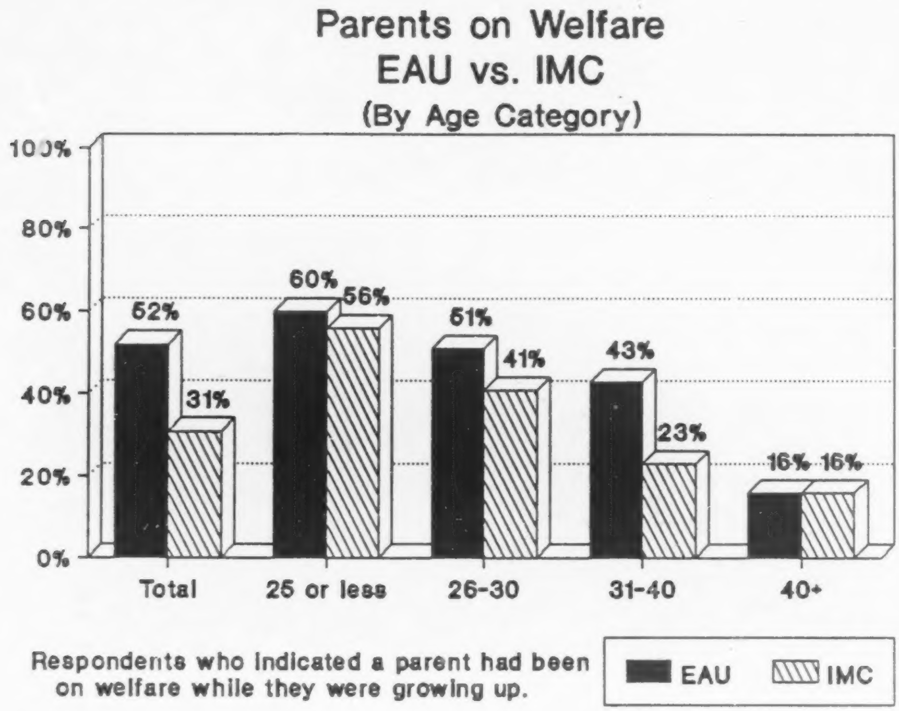
Previous discussions of the relationship of work and welfare histories to homelessness have pointed in two conflicting directions. In one, it is assumed that the homeless are the "poorest of the poor". Many argue that homelessness occurs among those families with the fewest resources available to them. That is, those with the weakest educational preparation and fewest job skills are those least able to remain housed in a difficult housing market. In contrast, some researchers have instead indicated that families most likely to become homeless are those new to poverty. According to these researchers, families that have long-term welfare histories are better able to stay housed than those families who are unaccustomed to coping with the problems faced by the welfare poor.

In order to effectively target those at greatest risk of homelessness it is necessary to determine the degree to which welfare and work histories are related to this phenomenon. Of equal importance, the nature of the relationship among these factors must be understood before preventive services can be developed.

Findings

Multi-generational welfare use is associated with increased risk of homelessness. Overall, more than half (52%) of the respondents in the EAUs indicated that one or both of their parents had received public assistance at some point while the respondent was growing up. In comparison, less than one-third (31%) of the IMC group indicated a parent who had been on welfare. Younger respondents were more likely to have grown up in a home that received public assistance benefits. However, even within age groups, the relationship between shelter use and parents' welfare use is sustained; in each age group those seeking shelter were more likely to have come from a welfare

Figure 14


Parents on Welfare
EAU vs. IMC
(By Age Category)
100%
80%
60%
40%
20%
0%
52%
31%
60%
56%
51%
41%
43%
23%
16%
16%
Total
25 or less
26-30
31-40
40+
Respondents who indicated a parent had been on welfare while they were growing up.
EAU
IMC

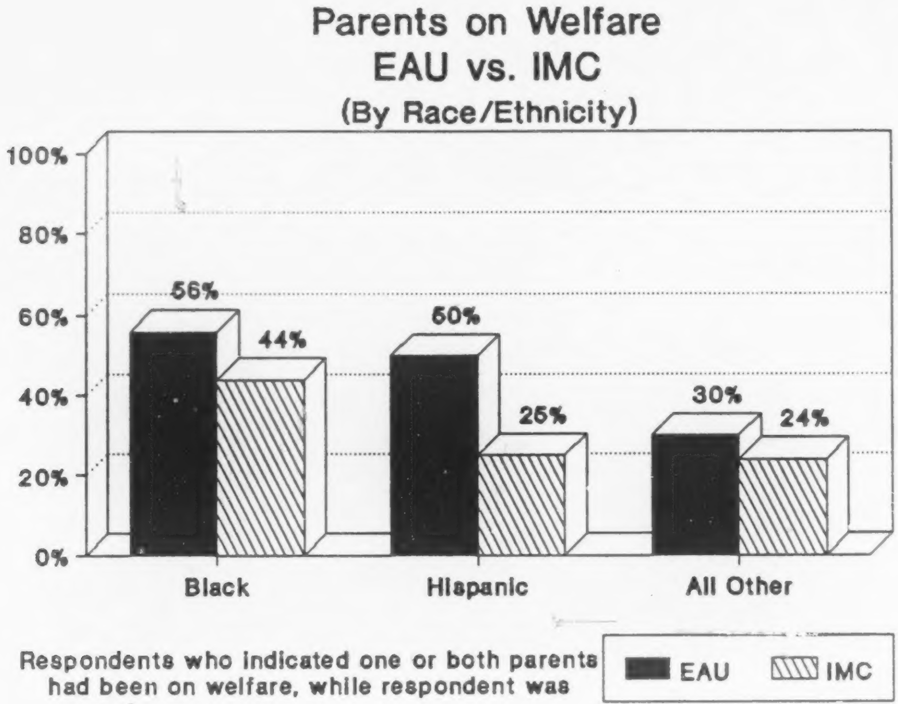
family than those who were housed (see Figure 14). This is especially dramatic in the 31 through 40 age group in which 43 percent of the EAU families are multi-generational welfare users, as compared with 23 percent of those in the IMCs.

Having had a parent on welfare appears to have more impact on risk of homelessness for Hispanic families than for black families (see Figure 15). Among black respondents, 44 percent of the IMC population and 56 percent of the EAU group indicated that their parents had received public assistance benefits. Among Hispanics, 25 percent of IMC families indicated multi-generational welfare use, while a much larger 50 percent of EAU families answered that their parents had been on welfare.

In terms of current relationships with the welfare system, homeless families were somewhat more likely to have had more than one IMC in the past three years; 75 percent of the homeless and 88 percent of the housed had one IMC during this time. By contrast, the IMC sample indicated greater change in the number of eligibility specialists to whom they had been assigned. Whereas 60 percent of the homeless families had one eligibility specialist in the past year, 49 percent of the housed had only one specialist assigned.

Contrary to what some might expect, homeless families were less likely to have themselves been on public assistance for a prolonged period of time. Among those under age 30, 38 percent

Figure 15



Respondents who indicated one or both parents had been on welfare, while respondent was growing up.

of the EAU sample were found to have had their case started five years ago. Forty-four percent of the young housed sample had their cases opened five years ago. Among those over age 30, long case histories are more common, but 75 percent of those housed had cases opened five years ago, as compared with only 63 percent of the homeless. Length of time on public assistance does not seem to be place one at risk of needing emergency housing. If anything, more recent arrivals to the system may be at greatest risk.

Frequent administrative closings appears to be the most clear indicator of risk among those variables related to welfare history. Whereas 56 percent of the EAU sample had experienced two or more of such closings, only 28 percent of those housed had had their case closed due to administrative reasons such as failing to return a survey or not showing up for a re-certification appointment. What can not be determined in this analysis is whether household disruption (mobility, etc.) leads to closings or whether the closings and the subsequent loss of funds leads to the disruption.

As with administrative closings, homeless families were far more likely to have had a social worker or case worker, other than their eligibility specialist. For example, nine percent of the homeless families reported having been assigned, at some time, a worker from Special Services for Children (SSC). Only two percent of the housed had this relationship with SSC. It is interesting to consider the extent to which those families that would appear most troubled and thus most in need of special services are receiving them. Having been assigned an SSC case worker was compared with the extent of drug and abuse problems in the home. Specifically, EAU families were categorized in terms of whether they indicated that there was a problem with substance abuse in the home and whether the children or mother had been abused or battered by a spouse or boyfriend. Contacts with SSC are more common among families with these problems. Among those with none of these problems, only five percent indicated that they had been assigned a caseworker from SSC. This rises to 19 percent for those families with two or more of these problems.

In contrast to welfare history, lack of educational attainment does not appear to be related to risk of homelessness. Overall, the level of educational attainment for this population is poor. Sixty percent of the EAU sample and 63 percent of the IMC sample stated that they had completed fewer than 12 years of schooling. Twenty-three percent of the IMC group had completed 8 or fewer years (see Figure 16). When age is considered, the relationship between education and homelessness appears unstable; in one age category the IMC group looks slightly better, while in another it looks slightly worse.

Figure 16

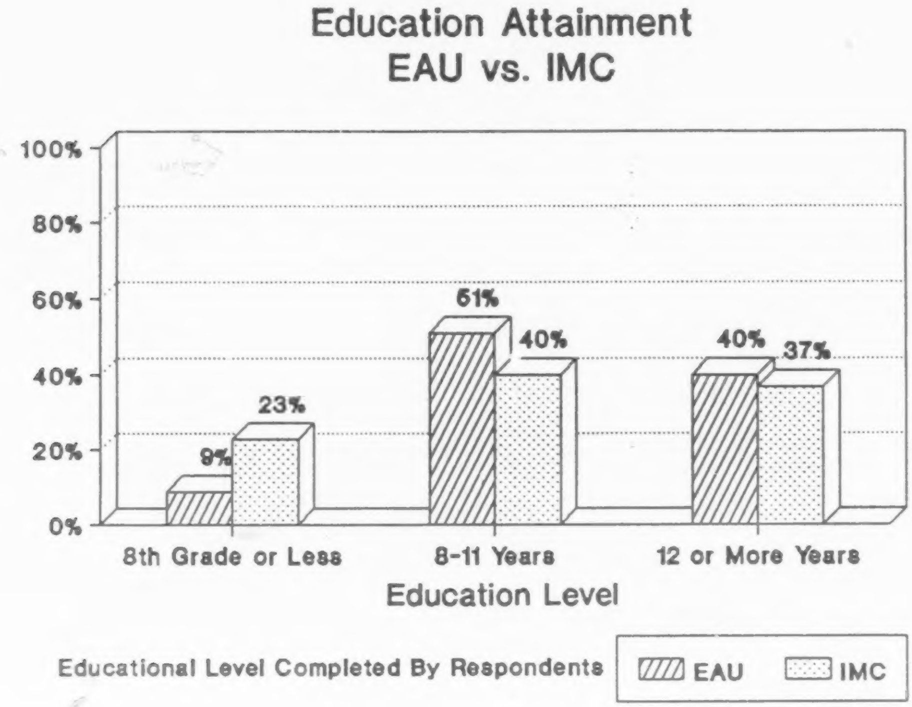
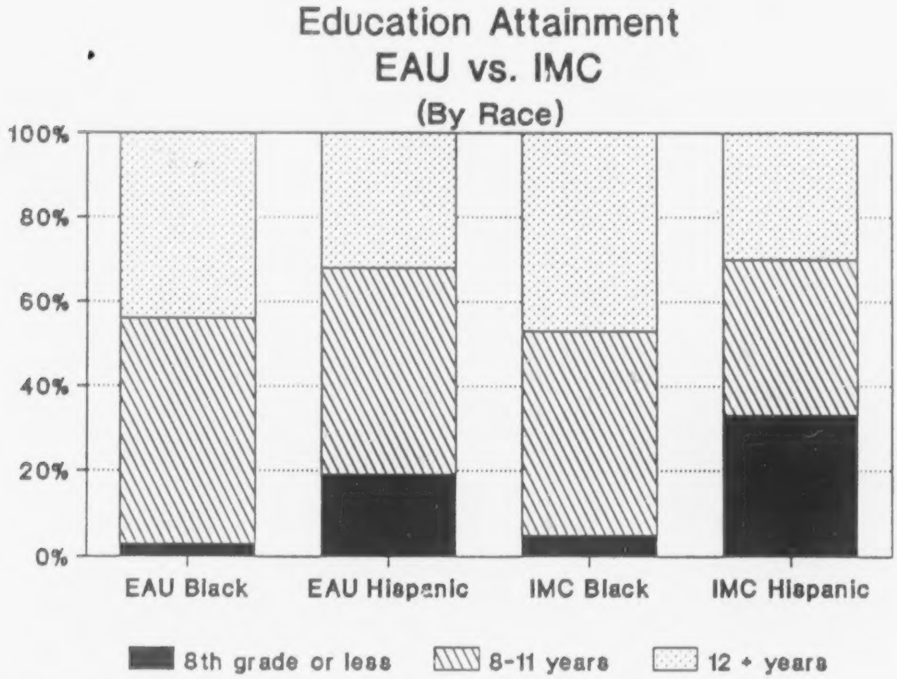

Education Attainment
EAU vs. IMC
100%
80%
60%
40%
20%
0%
9%
23%
51%
40%
40%
37%
8th Grade or Less
8-11 Years
12 or More Years
Education Level
Educational Level Completed By Respondents
EAU
IMC

Figure 17


Education Attainment
EAU vs. IMC
(By Race)
100%
80%
60%
40%
20%
0%
EAU Black
EAU Hispanic
IMC Black
IMC Hispanic
8th grade or less
8-11 years
12 + years

Within both samples, Hispanics average fewer years of schooling than do blacks (see Figure 17). Among Hispanic respondents, 18 percent of those in the EAUs and 33 percent of those in the IMCs indicated that they had completed eight or fewer years of school. In contrast, only 3 percent of the blacks interviewed in the EAUs and 5 percent in the IMCs had such limited formal education. However, in none of the racial/ethnic groups explored was educational attainment a strong indicator of risk of homelessness.

Prior work experience does little to protect a public assistance family from homelessness. The homeless parents were somewhat less likely to have worked full-time for a year than their housed counterparts (see Table 19). In the IMC sample, 40 percent had held a full-time job for at least a year. Among those seeking shelter, only 33 percent had a year of full-time work experience. However, these differences are diminished once the age of the respondents is considered. Younger respondents were somewhat less likely to have had long term full-time employment and, therefore, much of the difference between the EAU and IMC groups results from their differential age distributions. For example, among those aged 25 and younger, only 25 percent of the EAU group and 23 percent of the IMC group had worked full-time.

Table 19

RECENCY OF FULL-TIME EMPLOYMENT EXPERIENCE

Age		Percent With F/T Experience	Time Since Last F/T Experience More Than 2 Years Ago	Within Past 2 Years
25/less:	EAU	25%	25%	75%
	IMC	23%	50%	50%
26-30:	EAU	40%	43%	57%
	IMC	44%	69%	31%
31-40:	EAU	41%	47%	53%
	IMC	43%	75%	25%
41+	EAU	32%	63%	38%
	IMC	45%	85%	15%
Total	EAU	33%	39%	61%
	IMC	40%	74%	26%

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

It is interesting to note that by limiting the analysis to those respondents who had full-time job experience, we find that those in the EAU group have had more recent employment than those in the IMCs. Among those seeking shelter, 61 percent had last worked full-time during the past two years, while only 26 percent of the housed respondents had such recent full-time employment. This difference is noted within each age category.

Discussion

Both the EAU and IMC samples can be characterized by high rates of multi-generational welfare dependence, poor educational attainment, and poor employment histories. This discovery is neither new nor surprising. It is also not surprising to find that age and race affect the distribution of these factors among the sample populations. For example, in regard to education, the very high numbers of Hispanic respondents who had not reached high school is consistent with previous research demonstrating the tremendous risk of dropping out among Hispanic Americans.

What is surprising is that these factors are very poor predictors of homelessness. Although having had a parent on welfare does seem to increase one's risk of entering emergency housing, this constellation of welfare and work factors adds little to our understanding of the differences between the housed and homeless poor in New York City. The hypothesis that it is the "poorest of the poor" who enter homelessness is supported by the fact that multi-generational families are at greater risk. But it is refuted by the fact that the homeless are no worse off in terms of education and, if they have full-time work experience, are more likely to have worked more recently. Neither can the alternative hypothesis, that those new to poverty are at greatest risk of homelessness, be fully supported by these findings.

It is interesting to note that movement within the IMC system does not seem to be highly correlated with risk of homelessness. That is, changes in IMCs and changes in eligibility specialists also do not contribute greatly to our understanding of why some families become homeless. However, frequent administrative closings are highly correlated with homelessness. Life disruptions which contribute to the risk of homelessness (e.g., frequent moves) may also increase one's risk of having a case closed. Conversely, closings may place families at risk of disruption. Likewise, assignment of an SSC caseworker is associated with increased risk of homelessness; many of the risk factors for homelessness discussed elsewhere in this report (e.g., drug abuse) are associated with increased incidence of child abuse. However, although those who report battering and serious substance abuse problems in the home are more likely to have had contact with SSC, the majority of families with such problems have not been assigned a caseworker by SSC. This may indicate a problem with case finding by this agency.

The characteristics most commonly understood to place a family at risk of requiring public assistance -- limited education, poor work history, and early welfare dependence -- are characteristics which make self-support difficult or impossible for a family. Both the IMC and EAU families have, by definition, demonstrated an inability to become financially independent. Therefore, it is understandable that a lack of skills necessary for financial independence is not what drives people into homelessness. If this were the case then the great majority of New York City's AFDC families would be requesting emergency shelter. Since only a relatively small minority of such families require shelter placement, we must look elsewhere to identify factors which distinguish successfully housed families from the homeless. Better understanding of the relationship between administrative closings and risk of homelessness may provide the key.

Implications for Policy

If one wishes to address the problem of welfare dependency, educational attainment, work history, and prior family use of public assistance all must be considered. Clearly, the AFDC population in New York City demonstrates a "poor performance" in these matters. However, if our aim is to target services to prevent homelessness, variables of education and employment do not appear to be of merit. This would imply that programs that aim to "break the welfare cycle" by enhancing one's employment skills are likely to have little direct impact on homelessness. As long as the family remains on public assistance, increased educational attainment or job experience do not seem likely to be effective strategies for keeping families from entering emergency housing. However, since the great majority of New York City's homeless families are families from the public assistance rolls, a reduction in the number of families on welfare might reduce homelessness as well.

Social Relationships
Summary

Previous research has shown that people's social ties to others are related to health and well-being in general and to homelessness in particular. We studied both the existence of social ties and their quality in the Emergency Assistance Unit and Income Maintenance Center samples.

Surprisingly respondents from the EAUs were more likely than respondents from the IMCs to report that they had a mother or grandmother living, another close relative, or a close friend. However, they were less able to draw on their social network for housing assistance because network members had less room for them, because they had already worn out their welcome by doubling up with the network members, and because the quality of their social ties, as reflected in disruptive social experiences, was relatively poor.

An index of six early disruptive experiences -- living in foster care, in an institution, or on the street, running away, or being physically or sexually abused as a child or teenager -- and a second index of three recent experiences -- ceasing to live with a boyfriend, being told to leave by one's parents, or being abused as an adult -- both differentiated between the EAU and IMC samples. The differences were strongest for the younger age groups, where disruptive experiences were two to three times as common among those seeking shelter as among those stably housed. The total list of nine experiences was still more powerful, especially when combined with age. Over a quarter (26%) of the EAU sample could be identified by the joint criteria of being thirty or under and reporting at least two of the disruptive experiences. Only 4% of the IMC sample met these two criteria.

VII. SOCIAL RELATIONSHIPS

Background

There is a large literature in psychology and sociology showing that both the existence and the quality of people's social ties to relatives and friends are linked to their health and well-being (see Cohen & Wills, 1985; House, Landis, & Umberson, 1988 for reviews). Much of the evidence suggests that social ties are especially important to individuals undergoing stress and that social support can buffer individuals from the effects of stressful life events. McChesney (1987) argued that social relationships are a critical part of the safety net preventing people from becoming homeless. Her study of homeless people in Los Angeles showed that a surprisingly small and shrinking proportion of the respondents had parents who were alive, who had enough room for their child to stay with them, and who would be willing to take their child in. This study had no housed comparison group. Bassuk and Rosenberg (1988) found that mothers in homeless families in Boston were less able than those in a housed comparison sample to name adults whom they could rely on during times of stress.

Negative or conflictual social relationships are often more potent predictors of outcomes in general population samples than are positive social supports (Shinn, Lehmann, & Wong, 1984), and disruptive social relationships seem unusually prevalent among homeless women. Although Bassuk (1988) excluded residents of shelters for battered women from her sample, she nevertheless found that homeless women were more likely than women in the comparison group to report a relationship in which they had been battered. The homeless women also had been more frequently abused as children. McChesney (1987) similarly found that a variety of childhood experiences including physical or sexual abuse, running away from home, and spending time in foster care, an institution, or on the street were relatively common in her predominately male sample. These experiences may have disrupted the child's ties to the family or may simply reflect familial relationships that were already problematic in childhood or adolescence and that might render family members less reliable sources of support adulthood.

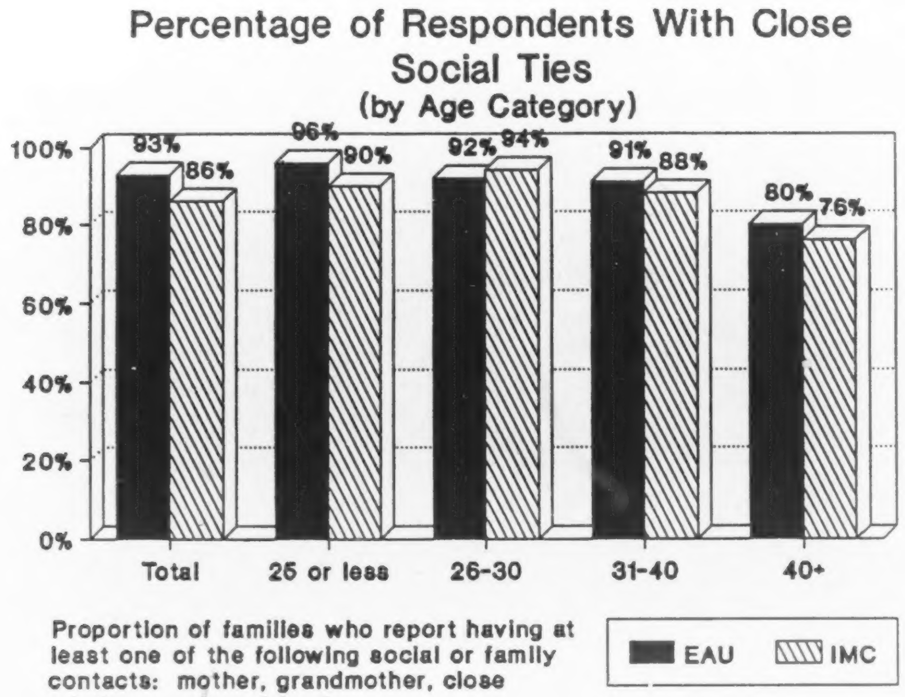
Our study examined both the existence of current social ties that could serve as resources to families and evidence that either current or early social relationships were disrupted or conflictual for respondents drawn from the Emergency Assistance Units and from the Income Maintenance Centers.

Findings

The Existence of Social Ties. We adopted a measure from McChesney (1987) to study the current social networks of the two groups. We asked respondents whether they had 1) a mother or grandmother living, 2) another close relative, and 3) a close friend. Within each category, if the respondent had such a person, we asked, "How long has it been since you have seen him or her?", "Does he or she have enough room for you and your children to live with him or her, or not?", and, if so, "Would her or she be willing to let you live there now for more than a few days if you asked, or not?" Results showed parallel patterns across each type of social contact, although the percentage of positive responses was always higher for the mother or grandmother than for the two other types of network members. For simplicity, therefore, we report the most positive response given across the three categories of social contacts. (If respondents had more than one person within a category, for example, two close friends, only the most positive answer within each category was recorded.) Results were highly dependent on the respondent's age, especially in the sample drawn from the EAUs.

Surprisingly, more respondents seeking emergency housing (93%) than respondents from the public assistance caseload (86%) reported that they had a mother or grandmother living, another close relative, or a friend. This pattern was muted somewhat within homogenous age groups (see Figure 18), but still obtained. Respondents from the EAUs also reported having seen their contacts more recently. For example, 70 percent, compared with 58 percent in the IMC sample, had seen either their mother or their grandmother within the last month. Respondents seeking

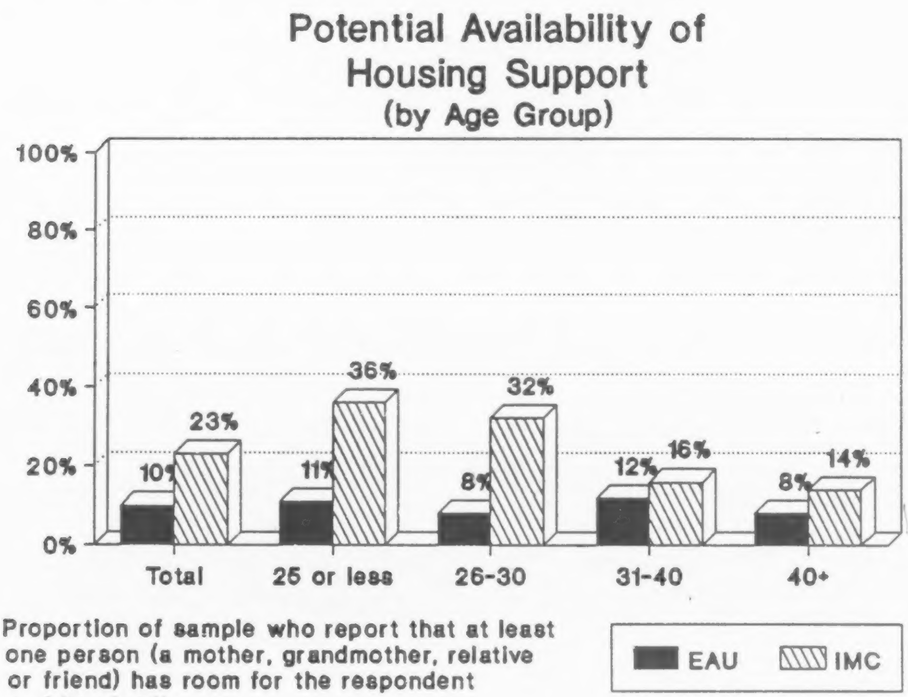
Figure 18



Percentage of Respondents With Close Social Ties (by Age Category)

Proportion of families who report having at least one of the following social or family contacts: mother, grandmother, close relative, or close friend.

Figure 19



Proportion of sample who report that at least one person (a mother, grandmother, relative or friend) has room for the respondent and her family.

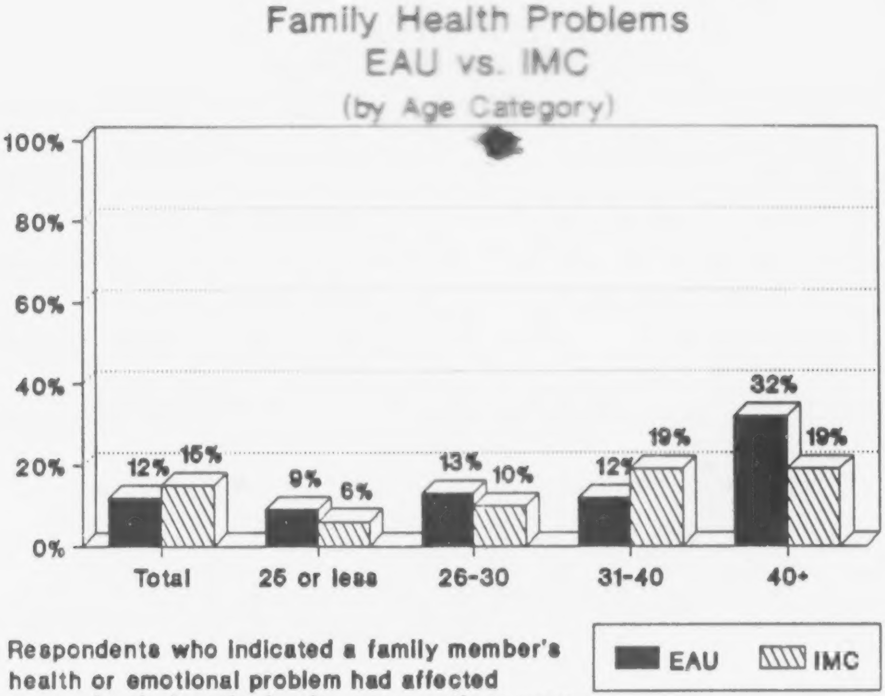
emergency housing were also far more likely than respondents from the IMCs (81% vs. 52%) to offer a name and address when asked for a person who would be "most likely to know where you will be".

The pattern reversed itself, however, when respondents were asked whether the various members of their social network had room for the respondent and her children to live there. Respondents from the IMCs were twice as likely as those from the EAUs to report (23% vs. 10%) that someone had room. This difference was exaggerated for respondents 30 and under where the ratio in the two samples was over three to one, as shown in Figure 19.

The difference favoring the IMC sample was strongest for the question about whether the social contact would allow the respondent to live there now, if asked. Only 4 percent of the EAU sample, compared with 18 percent of the IMC sample answered affirmatively. Once again disparities were largest for the youngest age groups, as shown in Figure 20.

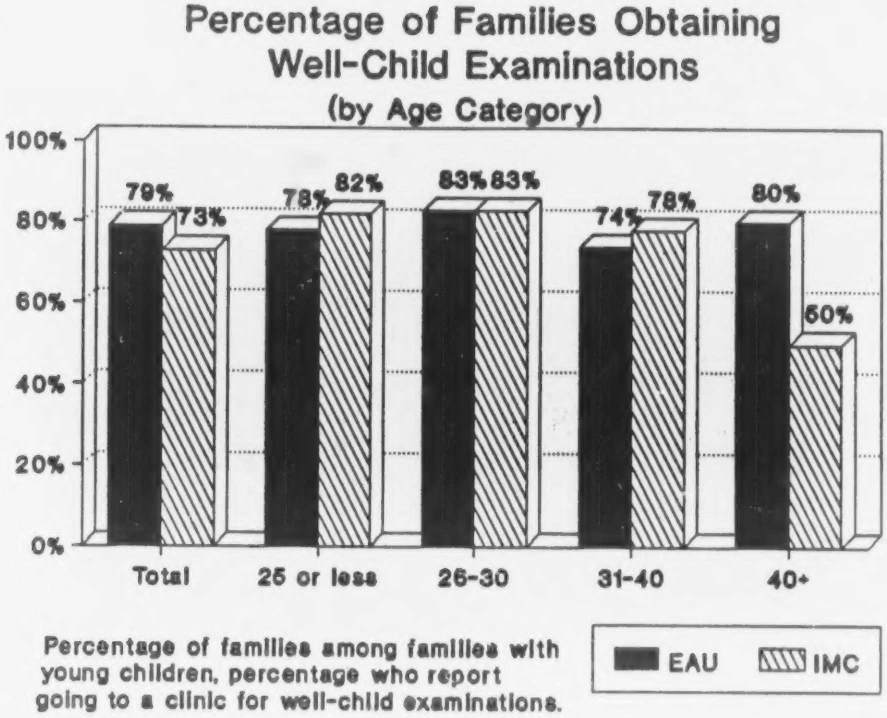
Homeless families may not have been able to stay with parents, relatives, or friends because they had already worn out their welcome. Among those members of the EAU sample who said their mother or grandmother had room for them (only 52 overall), less than fifth (16%) of those who had already stayed with their parents either the previous night or for the longest period in the last year said that their mother or grandmother would take

Figure 10



Respondents who indicated a family member's health or emotional problem had affected respondent's functioning for one month or more.

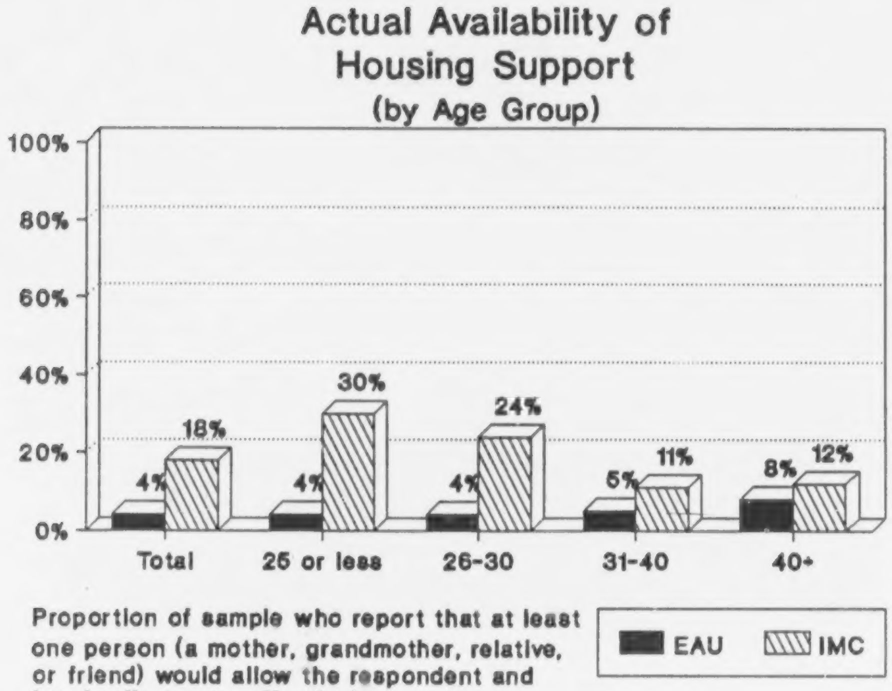
Figure 11



Percentage of Families Obtaining Well-Child Examinations (by Age Category)

Percentage of families among families with young children, percentage who report going to a clinic for well-child examinations.

Figure 20



Proportion of sample who report that at least one person (a mother, grandmother, relative, or friend) would allow the respondent and her family to stay, if asked.

them in now, compared with two thirds (67%) of those who had not already stayed with their patents. Almost four times as many EAU families as IMC families (15% vs. 4% of the full samples) had already been asked to leave by their parents. Of 106 EAU respondents asked to leave within the past year, only one said the mother or grandmother would take her in now.

Being asked to leave by parents is one type of experience that may indicate poor quality of social ties for homeless families. The next two sections examine other disruptive experiences reported by respondents during childhood and adolescence or during adulthood.

The Quality of Ties: Early Disruptive Experiences. Following McChesney (1977), we inquired about the occurrence of six experiences that indicated disruptions of social relationships before the respondent turned eighteen: living in a foster home; living in an institution or group home; running away from home, a group home, or an institution for a week or more; living on the street, a public place, an abandoned building, the subway, or similar place; being physically abused; and being sexually abused. Table 20 shows the proportion of respondents in the two groups reporting each of these experiences. At least 10 percent of the EAU sample reported each of the six experiences, with running away being the most common overall, and each of the experiences differentiated between families seeking shelter and

Table 20

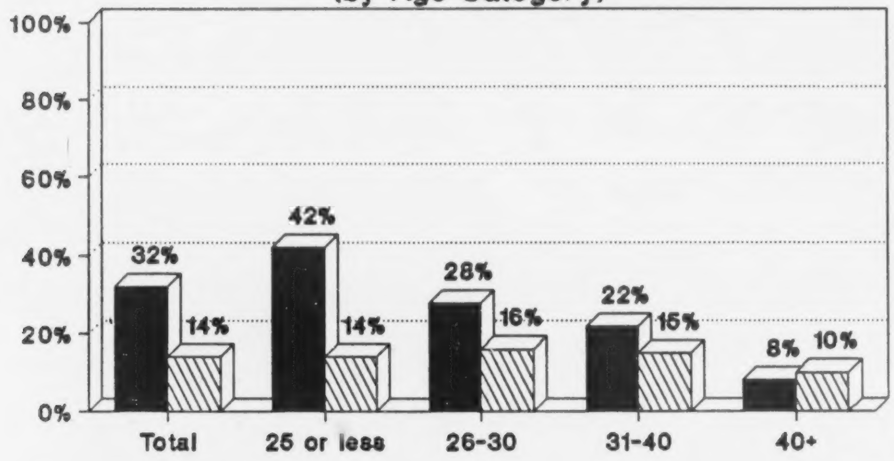
EARLY DISRUPTIVE EXPERIENCES BEFORE AGE 18: EAU SAMPLE RELATIVE TO IMC SAMPLE

	EAU	IMC
Lived in foster home	10%	3%
Lived in institution or group home	10%	2%
Ran away for a week or more	21%	6%
Lived on the street	11%	2%
Physical abuse	11%	7%
Sexual abuse	10%	4%

NOTE: Categories are not mutually exclusive. An individual may have had none, one or more than one of these experiences.

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Figure 21


Percentage of Respondents With At Least One Early Disruptive Experience

(by Age Category)

Proportion of sample reporting at least one disruptive early experience (living in an institution, foster care or on the street, running away, being physically or sexually abused) prior to the age of eighteen.

■ EAU ▨ IMC

those in the public assistance caseload.

Disruptive experiences were especially important for the younger age groups. Figure 21 shows the proportion of respondents who reported having at least one of these experiences, broken down by age. Nearly a third (32%) of the EAU sample had experienced at least one early disruptive experience, compared with about a seventh (14%) of the IMC sample. Within the IMC sample, the proportions were stable across the four age groups. In the EAU sample they decreased sharply with age, starting with 42 percent in the youngest age group and reaching the level of the IMC sample only in the small and hence unstable oldest group.

Interestingly, the predictive power of these experiences was stronger among Hispanic than among Black respondents. For four of the six variables the proportion of Hispanic EAU respondents was higher and the proportion of Hispanic IMC respondents was lower than for their Black counterparts.

The Quality of Ties: Disruptive Adult Experiences. We asked about four categories of disruptive experiences that may have occurred to respondents as adults. The first, being separated, divorced, abandoned, or widowed in the past year did not differentiate between the samples (12% in the EAU sample vs. 14% in the IMC sample), but the other three did, as shown in Table 21. These were being told to leave by one's parents in the

Table 21

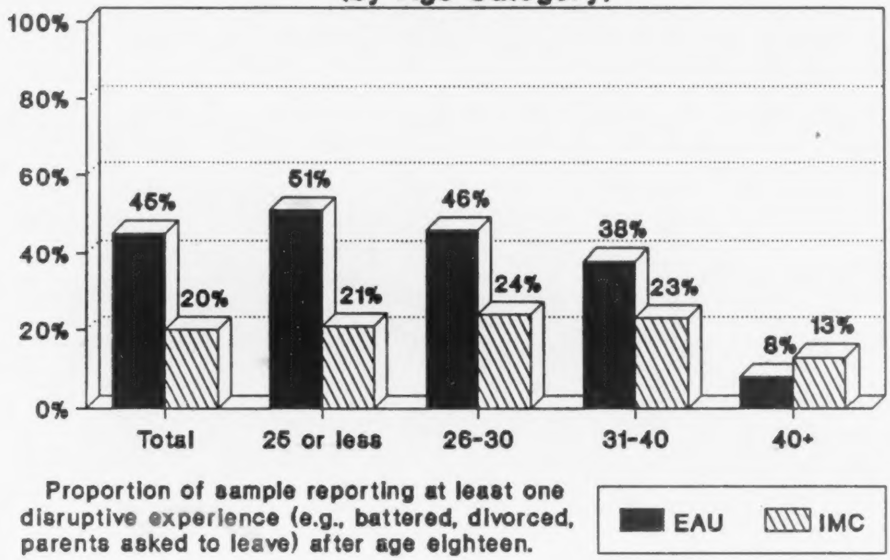
ADULT DISRUPTIVE EXPERIENCES
EAU SAMPLE RELATIVE TO IMC SAMPLE

	EAU	IMC
Told to leave by parents last year	15%	1%
Stopped living with boyfriend last year	16%	4%
Abused as an adult	26%	16%

NOTE: Categories are not mutually exclusive. An individual may have had none, one or more than one of these experiences.

Source: 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Figure 22



Percentage of Respondents With At Least One Adult Disruptive Experience
(by Age Category)

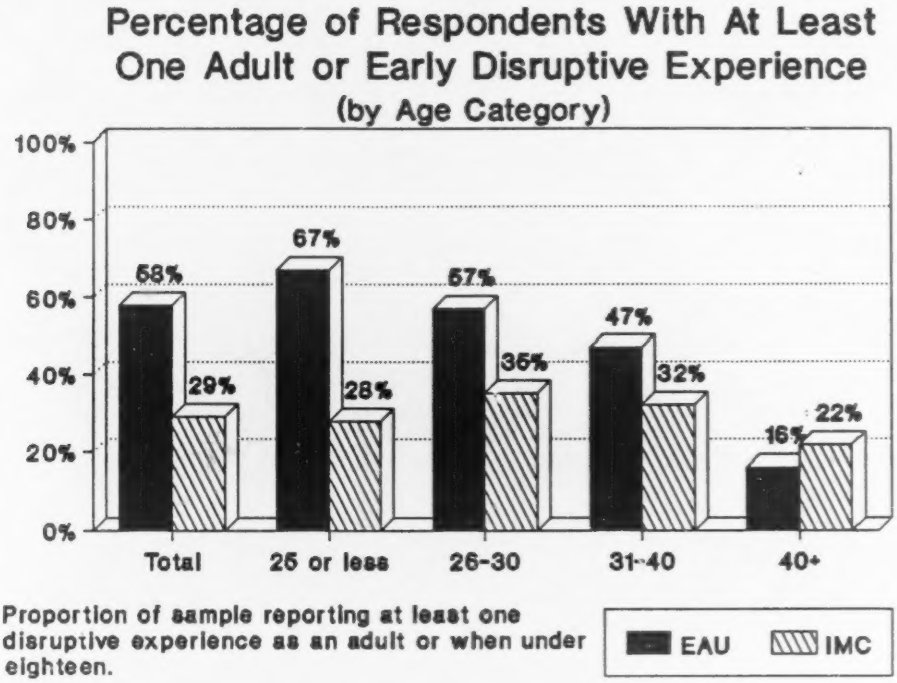
Proportion of sample reporting at least one disruptive experience (e.g., battered, divorced, parents asked to leave) after age eighteen.

past year, ceasing to live with a boyfriend in the past year and being physically abused or threatened with violence by a person you were involved with as an adult. Being abused as an adult was strongly related to a prior history of abuse as a child, especially in the EAU sample. Abuse of the respondent's own children by a person she was involved with did not distinguish between the two groups (5% in the EAU sample vs. 3% in the IMC sample), and almost always occurred in the context of abuse of the mother.

Figure 22 shows the proportion of the two samples who reported at least one of the three adult experiences (ceasing to live with a boyfriend, being told to leave by parents, or being abused as an adult) broken down by age. As with the childhood experiences, the proportions with the IMC sample were relatively stable across age groups, averaging 20 percent. Proportions in the EAU sample started at over 50 percent in the youngest age group and declined with age, averaging 45 percent overall.

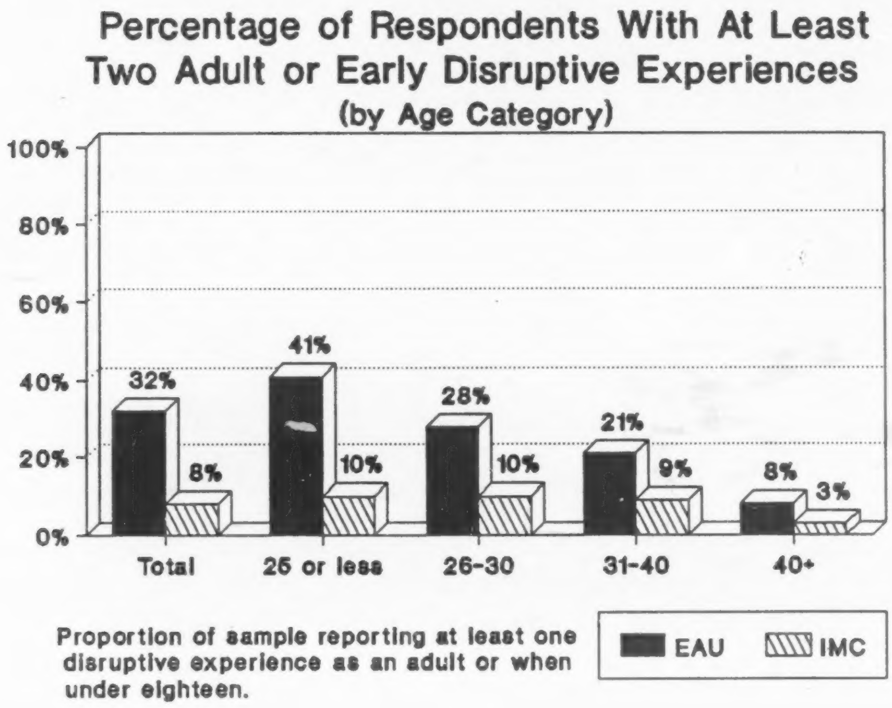
Combining the six childhood and three adult experiences yielded a potent index for differentiating the two samples. Figures 23 and 24 show the proportions of the two groups who reported at least one and at least two of the experiences by age. Overall, 58 percent of the EAU sample, compared with 29 percent of the IMC sample had experienced at least one of the nine events, with the proportion rising to over two thirds in the

Figure 23


Percentage of Respondents With At Least One Adult or Early Disruptive Experience (by Age Category)

Proportion of sample reporting at least one disruptive experience as an adult or when under eighteen.

Figure 24



Percentage of Respondents With At Least Two Adult or Early Disruptive Experiences (by Age Category)

Proportion of sample reporting at least one disruptive experience as an adult or when under eighteen.

youngest group of those seeking shelter. Although this measure identified a substantial proportion of those seeking shelter, the numbers of "false alarms" in the stably housed sample were also relatively high. False alarms are relatively costly in a prediction model because the population of families on public assistance is much larger than the population of families seeking shelter.

If we require that respondents have experienced at least two of the nine events, the false alarm rate drops to 8 percent, while still identifying 32 percent of the EAU sample. Finally, if we consider the facts that the EAU sample was younger than the IMC sample and that the disruptive experiences were more potent predictors for younger than for older respondents seeking shelter, we can obtain a sill stronger index. Fully 26 percent of the EAU sample was 30 or below and reported at least two of the nine experiences, compared to only 4 percent of the IMC sample.

The imbalance between the proportions of the two samples who had experienced criterion number of events grows larger as the criterion is raised. For example, 80 of the 704 respondents seeking shelter (11%) compared with 9 out 524 (2%) of the IMC sample had experienced four or more of these disruptive events. Such facts suggest the potency of these events in determining vulnerability to homelessness.

Discussion

Contrary to previous research, respondents in homeless families did not appear to lack social networks. They were actually more likely than respondents in housed families to report having a mother or grandmother living and to identify close relatives and friends. They were far less likely, however, to report that one of their contacts had room for them and their families or that someone would be willing to take them in.

There are several possible explanations for the reversal in pattern between the questions about the existence of social ties, which favored the EAU sample, and the questions about making use of these ties to obtain housing, which favored the IMC sample. First, attempts to secure housing and a need to keep in touch despite frequent moves may have prompted families seeking emergency housing to maintain or revive their contacts with everyone they could. The stably housed IMC sample may have had less need to call on their social networks and thus less awareness of their existence. Second, the relatives and friends of the homeless families may simply have had fewer resources to offer. There is some evidence for this in that the EAU respondents, compared to the IMC sample, felt that fewer of their contacts had room for them and their families.

Third, homeless families may have worn out their welcome with parents, relatives, and friends, as indicated by the large numbers who had previously doubled up with others and who had been told to leave by their parents. The fact that those who had been told to leave in the past year doubted their future welcome is further evidence for this possibility. Finally, although homeless families may have maintained reasonable levels of social ties, relative to the comparison group, the quality of these ties was relatively poor, as reflected in both childhood and adult experiences indicating conflict.

As in previous research, experiences indicating disruptions in social relationships, whether occurring early in life or in adulthood, were strongly related to homelessness. Each of nine such experiences made individual contributions to differentiating between respondents who were requesting shelter and those from the general public assistance caseload. Together the nine events formed a powerful predictive index, especially for younger respondents.

Although the adult experiences, such as being told to leave by parents, may have precipitated homelessness, the childhood experiences can be thought of only as increasing vulnerability. Each of the nine events would presumably make it more difficult for respondents to turn to parents or to others for help in the face of a housing problem. The difficulties were greatest for the youngest respondents who may have been most likely to rely on family in times of crisis.

Implications for Policy

Solutions in the area of social relations are not isomorphic to problems. The City cannot readily repair or replace disrupted social networks or enhance the quality of social relationships. Rather the disruptive experiences should be seen as signs of vulnerability, or as early warning signals of homelessness. Since young families whose heads report these experiences are at high risk, efforts should be made to identify them and offer them all the preventive and supportive services to which they are entitled.

One drawback to using an index of disruptive experiences in an early warning system is that such experiences might be over reported if it became known that they led to enhanced services. On the other hand, it would be unfortunate to minimize the very real trauma experienced by many heads of families or to lose a strong predictor of homelessness over concern that clients are "gaming the system." Many of the events are verifiable by checking records or by interviewing clients. Hence it would seem valuable to include an assessment of disruptive experiences in field trial of an early warning system for homelessness.

Another implication of these findings is that efforts to divert families from the shelter system by encouraging them to double up with friends or relatives are unlikely to be effective. Families entering shelter do not feel that they have other options (Figure 20) or have used up the options they had. Nor is it clear that young mothers should be sent back to families or boyfriends who have already rejected them or have abused them in the past. Alternative solutions that do not rely on already-conflicted social ties should be found.

VIII. PATHWAYS TO HOMELESSNESS

Introduction

Perhaps no finding is so striking as the finding that there is no one route to homelessness, no one story that encompasses the broad range of experiences and life conditions of New York City's homeless families. In one sense, we have interviewed over 700 homeless families and thus have 700 stories, each with its unique twists and turns. But such an interpretation is of little use to policy makers and service providers. More significantly, an accounting of individual families masks the distinctive sub-groupings that comprise the homeless population. The "stories" or varying pathways to homelessness presented below are based on five different categories of homeless families. Based on our review of the data, we come to the conclusion that there is no one route to homelessness but rather five general pathways, and each homeless family has travelled on one of them.

Many people who have considered the phenomenon of homeless families assume the following scenario. A family is in a stable housing situation. Something occurs which destabilizes that situation; illness, gentrification, compromised building conditions, and physical abuse have been suggested as factors which might operate in this manner. The family then enters emergency housing, either directly from this destabilized situation or after a period of "doubling up" with available family and friends. In this framework, homelessness is the result of a housing situation gone bad and a lack of alternatives to replace it.

This scenario is true for a segment of the homeless population. But even within this group, we find three important and distinctive stories. First, there are those families who were primary tenants in the place they stayed the longest last year, but who lost that place due to eviction or rent problems. Second, there are those families who were primary tenants last year but who were not evicted; they lost their housing due to building conditions, crime, or interpersonal problems. Finally, there are those who had once had there own place, but spent the greater part of last year living with others. The stories are different for each group in terms of the sources of homelessness and the paths taken to it.

On the other hand, the data indicate that for many homeless families, the scenario of a destabilized housing situation can not possibly be true. Far too many homeless families have never had an independent relationship with the housing market; they have never been the primary tenant for an entire year. Their paths to homelessness are necessarily different from those who lost their stable homes. Furthermore, among those who have never been the primary tenant, there are notable differences between those who spent the longest time last year with their parents and those who lived last year with other family members or friends. Again, the routes to homelessness and the policies that are needed to address them are distinctive for these distinctive groups. The distribution of the EAU sample across these five groups, and selected characteristics of each, are presented in Table 22.

In addition to presenting these five stories of the homeless, there is also a discussion of another substantial and important subgroup which cuts across these categorizations. Previous shelter users, who represent 32 percent of the those currently seeking shelter, present unique questions regarding homelessness policy. This discussion aims to present a more comprehensive picture of repeat shelter users.

The Evicted Homeless. In many ways this category of the homeless can be regarded as the most stable of all homeless families. They tend to be older and better educated than homeless families who did not have their own apartment last year. They are somewhat more likely to identify themselves as non-Hispanic, blacks. The proportion indicating health problems is similar to other homeless families. They are far less likely to report problems with substance abuse. Forty five percent, a comparatively large number, report full-time work experience. Their story, their path to homelessness, lies in an inability to keep up with rent payments and to avoid eviction.

Table 22 a - c

FAMILY CLASSIFICATIONS

I. - Primary Tenant Longest Time Last Year;
Left Due To Eviction Or Rent Problem.

II. - Primary Tenant Longest Time Last Year;
Left For Reason Other Than Eviction Or Rent Problem.

III. - Lived With Others Longest Time Last Year;
Once Primary Tenant For Period Of One Year.

IV. - Stayed With Parent Logest Time Last Year;
Never Primary Tenant For One Year.

V. - Stayed With Others Longest Time Last Year;
Never Primary Tenant For One Year.

Table 22a

Demographic Factors

	Total			Category		
Factor	EAU	I	II	III	IV	V
Age:						
25 or Less	44%	27%	28%	25%	78%	62%
26 - 30	29%	28%	33%	46%	17%	20%
31 - 40	23%	39%	33%	25%	5%	16%
40 +	4%	6%	6%	4%	0%	2%
	100%	100%	100%	100%	100%	100%
Race/Ethnicity:						
Black	54%	61%	47%	51%	58%	54%
Hispanic	40%	31%	48%	42%	35%	40%
Other	6%	8%	5%	7%	7%	6%
	100%	100%	100%	100%	100%	100%
Education:						
8 yrs or less	10%	10%	12%	11%	3%	10%
8 - 11 yrs	51%	40%	45%	51%	60%	56%
12 yrs	25%	25%	31%	25%	22%	24%
12 + yrs	14%	25%	12%	13%	15%	10%
	100%	100%	100%	100%	100%	100%

Table 22b

Selected Housing Characteristics

Factor	Total EAU	Category I	II	III	IV	V
Number of Residences in Last Year:						
1	42%	63%	56%	27%	48%	30%
2 - 4	43%	30%	40%	42%	45%	51%
5 or more	15%	7%	4%	31%	7%	19%
	100%	100%	100%	100%	100%	100%
Number of Residences in Past 3 Years:						
1	22%	43%	30%	5%	38%	10%
2 - 4	53%	47%	59%	50%	40%	59%
5 or more	25%	10%	11%	45%	22%	31%
	100%	100%	100%	100%	100%	100%
Crowding (Persons/Bedrm):						
1	17%	23%	24%	11%	---	2%
2 - 4	61%	62%	62%	57%	11%	27%
5 or more	22%	15%	14%	22%	89%	71%
	100%	100%	100%	100%	100%	100%
Index of Poor Building Conditions:						
None	36%	44%	27%	19%	46%	40%
1	18%	13%	18%	19%	22%	18%
2	16%	15%	11%	18%	16%	18%
3 or more	30%	28%	24%	44%	16%	24%
	100%	100%	100%	100%	100%	100%
Rent Greater Than $300	48%	51%	31%	70%	55%	53%
Prior Shelter Use	31%	22%	20%	53%	23%	35%
Ever Evicted	23%	67%	10%	31%	6%	11%

Table 22c

Selected Health, Parenting, and Work Characteristics
Percent of Respondents with "Yes" Response

Factor	Total EAU	Category I	II	III	IV	V
Health Problem	17%	20%	18%	25%	10%	15%
Nervous Problem	10%	8%	13%	16%	6%	9%
Well-Child Exam	79%	81%	81%	75%	77%	79%
Substance Abuse Problem in Family	12%	5%	12%	17%	13%	12%
Had Been Teen Mother	37%	31%	31%	45%	41%	37%
F/T Work Experience	33%	45%	32%	46%	24%	24%
Parents on Welfare	52%	48%	46%	46%	66%	56%
Pregnant/New Baby	55%	44%	46%	48%	71%	63%

More than half of this group lost the apartment they held for the longest time last year as a result of rent-related evictions. Twenty-six percent lost their apartments due to non-rent related evictions and 21 percent left because they were unable to make rent or utility payments. Ninety percent left this apartment within the last six months.

Prior to losing this housing, these families had experienced much lower rates of mobility than the other homeless families, with 43 percent having spent the last three years in one apartment. Their living situations were also less crowded than those for families who were not the primary tenants. However, more than half have fallen behind in their rent payment, 69 percent have been evicted, and 11 percent were doubled up in their apartment last year (i.e., others were living with them). Although 22 percent of those who lost their housing to eviction had prior shelter experience, this is somewhat less than the 32 percent of all homeless families who indicate prior shelter use.

Half of the evicted group spent the night before entering shelter in their own apartment but this is not the same apartment they stayed in for the longest period of time in the previous year. Eviction played a major role in losing the housing where they stayed just prior to requesting shelter. Forty-two percent had been evicted from the place they stayed last night for rent related reasons. Non-rent related evictions account for another

25 percent and 16 percent had problems with rent or utility payment.

Difficulty in keeping up with rent payments and evictions is the source of homelessness for this group. However, it is unclear as to why this group has had particular trouble with eviction and rent payment. In comparing them to housed families who are primary tenants, we find that those who head this group of homeless families are more likely to have had a child as a teenager. They have experienced more doubled-up housing situations and higher rates of prior shelter use than their housed counterparts. Despite these differences, the actual reasons why they could not keep up with rent or get along with their landlord remain elusive.

Primary Tenants Who Weren't Evicted. In regard to demographic composition, this group of homeless families is very much like the overall homeless families population. Although they tend to be somewhat older, their educational attainment, work histories, and health problems, including drug abuse, are typical of all homeless families. Of note, primary tenants who lost their housing for reasons other than eviction, are more likely than other homeless families to be Hispanic.

The vast majority (90%) had left the apartment they had lived in for the most time last year within the past six months. The most common reason for leaving the place they had stayed the most last year was building conditions (39%). This was followed by problems or conflicts with a boyfriend or spouse (23%), problems of crowding or being doubled up (14%), and fear of crime or drug use (10%). These reasons for leaving are interesting in light of the fact that this group averaged lower rents than other homeless families. These low rents may also be why they were less likely to fall behind in their rent payments or face eviction. Although those who lost their apartments for reasons other than eviction are somewhat less mobile than other homeless families, only 30 percent had lived in one place over the past three years. At 20 percent, prior shelter use is much lower than for the homeless overall.

One-third of those who had lost their apartment for reasons other than eviction spent the night before requesting shelter in their own apartment and another third had spent it with friends. They left the place they stayed last night for a variety of reasons: 32 percent had problems with being crowded or doubled up, 25 percent faced unsafe building conditions, and 13 percent had problems or conflicts with their boyfriend or spouse.

Having had their own place for a substantial time prior to shelter entry, this group now finds itself unable to find housing. Rent payment and eviction are not the source of homelessness for this group. Rather, it may well be that low-cost apartments are far more likely to present poor building conditions. High rates of mobility might ensue. Or this group, which typifies the homeless, experiences many more problems than those who are housed. Their path to homelessness seems to be filled with problems of poor housing conditions, health concerns, limited work experience, and fairly high rates of mobility.

Previous Primary Tenants Who Lived Elsewhere Last Year. The families in this group are those who had once had an apartment where they were the primary tenant for a period of more than a year, but have since been unable to reestablish themselves in a stable, independent living arrangement. The vast majority of these families (79%) had been the primary tenant sometime in the last year. However, when asked where they had stayed the most last year, a diversity of other living situations were reported. Living with parents, living with other relatives, and living with friends were most common. For 16 percent of these families, emergency housing was where they stayed the most last year. When asked why they had left the place they had stayed the longest last year, 63 percent cited problems associated with being doubled up. Conflicts with boyfriends or spouses (7%) and fear of crime (6%) were the next most common reasons given.

This is one of the most troubled of all categories of homeless families. They tend to have more health problems, and substance abuse is highest among this group of homeless families, with 14 percent reporting such a problem. Nearly half of the women heading these families had been teen mothers.

The housing histories of these families are reflective of the kinds of instability reflected in this portrait. They are a highly mobile group, with only five percent having lived in one place over the past three years. A dramatic 34 percent lived in seven or more different places. They are likely to have experienced more crowded living conditions and are somewhat more likely to have been late in their rent payments and to have been evicted. Their rents tend to have been higher than for other homeless families. And an extremely high 53 percent had previously used the shelter system.

Nearly half had spent the night before entering shelter with friends (46%), and an additional 35 percent had stayed with family members, including parents. Sixty-five percent of these families left the place they had stayed last night because of problems associated with being doubled-up.

This group of homeless probably best exemplifies the image of the family in a chronic state of homelessness. For many, this is not their first entry into emergency housing. Despite the fact that they once had an independent and stable living arrangement, during the past few years these families have gone from one living situation to another and they are more likely than other homeless families to have lives marked by disorganization. These families are likely to be among the easiest to identify and target. The question is, what services would be effective?

Living With Parents, Never Had Own Place. Approximately 14 percent of the homeless families were never primary tenants for a period of one year and lived the most of last year with their parents. This group was headed by the youngest mothers; 78 percent were age 25 or less. For this group, shelter entry does not represent the start of homelessness. Rather, it can be argued that shelter entry is a late-stage action for a family that has never been able to independently establish itself in the housing market. Only 6 percent of the general public assistance population falls into this category.

Half of the women in this group indicated that their parent had, in fact, asked them to leave during the past year. And many of these women came to the shelter directly from their parent's house; 48 percent indicated that they had resided in only one residence during the year preceding the shelter request. The parental home was extremely crowded in most cases. In fact, an extraordinary 89 percent reported that there were 4 or more people per bedroom. The parents, themselves, are likely to be or to have been welfare recipients; 66 percent of the mothers in this group report that their parent(s) had been on welfare sometime while they were growing up. This is higher than for other categories of homeless families.

Fertility was a particular issue for this subgroup of homeless families. Seventy-one percent were currently pregnant or had given birth in the past year. In addition, a somewhat high 41 percent also indicate that they had been teen mothers. Low educational attainment and lack of full-time work experience were also typical of this group.

Eviction was not a problem for these families since they had never had their own place for a period of a year; only 6 percent indicated they had ever been evicted. Similarly, somewhat fewer of them (23 percent) had a prior shelter stay, as compared with 31 percent of all homeless families. Health and nervous problems were also less common for those who were living with their parents; this probably is a result of their youth.

It would seem that a substantial number of homeless families are entering shelter almost directly from their parent's home. These households are extremely crowded and characterized by poverty. It may well be that the pregnancies and recent births which are so common among this particular group of young homeless women represent a critical point of stress within these households. The shelters may be a way out of a difficult extended family situation.

Living With Others, Never Had Own Place. Another large subgroup of homeless (nearly 30%) spent the longest time last year living with friends or family members, other than parents.

Like those staying with their parents, this group has never had an independent living situation (that is, been primary tenants) for a period of year. This is not a common situation for the IMC population; only 6 percent have never been primary tenants and are staying with persons are other than their parents.

These families were living under extremely crowded living conditions, with 71 percent indicating that there were four or more persons per bedroom. High rates of mobility are characteristic of this group, with only 30 percent reporting no moves during the past year and 19 percent reporting more than 5 moves. Thirty-five percent indicated prior use of the shelter system, as well. Not surprisingly, since they have not had an extended period of primary tenancy, relatively few (11%) indicate they have ever been evicted.

Although older than those homeless mothers living with their parents, this group is substantially younger than the homeless overall. Sixty-two percent are aged 25 or less. As with those women living with their parents, pregnancies and new babies are common among this group. Sixty-three percent reported either being pregnant at the time of the interview or having had a baby in the past year.

Comparing this subgroup of homeless families, with the overall homeless families population, we find a greater likelihood of having had a parent on welfare, less full-time work experience, and somewhat lower educational attainment. However, few other differences can be noted between this subgroup and the rest of the homeless families.

In some ways this subgroup may be seen as a cross between those who have not really left the parental home and those who once had their own place, but had not during the year prior to the shelter request. Like those living with their parents, this group is comprised of women who are mostly young, often pregnant or new mothers, who have not been able to establish themselves in the housing market. However, unlike those living with their parents, this group has experienced substantial mobility and high rates of prior shelter usage. They differ from the group who once had primary tenancy in that they never had an apartment to lose. But they mirror them, in that their living arrangements prior to the shelter request are characteristic of the chronically homeless.

Repeat Shelter Users. The sample of repeat shelter users includes some members from each of the above five distinct subgroups. Almost a third of the entire EAU sample (31%) reported that they had been in a shelter previously, as compared with 7 percent of the IMC sample. This was true even though respondents were excluded from the samples if they reported that they had been in shelter within the past month. Fifty five percent of the repeat shelter users had last left the shelter

Table 23

Descriptive Statistics For Potential Predictors Of Homelessness

	Sample Distribution			
	Previous Shelter Users:		Not Previous Shelter Users	
	EAU (n=40)	IMC (n=222)	EAU (n=482)	IMC (n=484)
Housing:				
Primary Tenant Last Year	25%	70%*	43%	87%*
Once Primary Tenant	32%	3%	13%	3%
Never Primary Tenant:				
Stayed with Parents Last Year	10%	5%	16%	6%
Stayed with Others Last Year	32%	23%	28%	4%
More Than 3 Pers/Bdrm Last Year	80%	90%	85%	73%*
More Than 2 Moves Within Past Year	56%	20%*	20%	3%
Ever Doubled-Up	86%	48%*	79%	37%*
Ever Evicted	26%	20%	22%	6%*
Ever More Than 2 Months Late W/ Rent	22%	40%	23%	20%*
Never Paid Rent	11%	8%	13%	7%
2 or More Poor Building Conditions	60%	63%	41%	36%
Knows Previous Shelter User	55%	35%**	37%	13%*
Parenting:				
Pregnant	39%	10%*	32%	5%*
Had a Baby Within Past Year	28%	18%	25%	10%
Had a Child Before Age 18	42%	53%	34%	21%

* $p<.1$ for chi square test of significance for differences in percentages across sample.

** $p<.05$ for chi square test of significance for differences in percentages across samples.

Table 23 (cont.)

Descriptive Statistics For Potential Predictors Of Homelessness

	Sample Distribution			
	Previous Shelter Users:		Not Previous Shelter Users	
	EAU (n=40)	IMC (n=222)	EAU (n=482)	IMC (n=484)
Health, Mental Health and Substance Abuse:				
Health Problem Last Year	21%	38%	16%	22%
Well-Child Exam in Past Year	81%	90%	78%	71%
Nervous Problem in Past Year	15%	8%	8%	17%
Overnight Mental Hospital	5%	0%	4%	1%
Substance Abuse Problem	8%	3%	3%	1%
Ever Detox Patient	13%	0%	6%	2%
Education, Work and Welfare:				
12 or More Years of Education	38%	23%	41%	38%
Worked F/T for 1 Year or More	30%	23%	35%	42%
Parents on Public Assistance	53%	53%	51%	29%
Ever Had a SSC Caseworker	11%	3%	8%	2%
Currently WIC, New Baby or Pregnant	41%	28%	33%	70%
Social Supports:				
3 or More Social Disruptions	25%	10%	15%	3%
Parents Told You to Leave	19%	5%	14%	1%
Demographics:				
30 Years of Age and Younger	75%	48%	71%	38%
Black	56%	53%	53%	30%
Hispanic	36%	48%	41%	61%
Other	8%	0%	6%	9%

within the past six months and three months was the median length of stay. The extent of repeat shelter use suggests one potential focus for HRA's policies aimed at reducing the incidence of homeless families. Clearly, if one could develop strategies to reduce the number of families in emergency housing who return to shelter, significant reductions in the number of entries into the system are likely to ensue.

There were surprisingly few dramatic distinctions between repeat users and new users of emergency housing (see Table 23). Age was not consistently related to prior shelter use. Nor were there differences in the racial composition of the repeat use and new use groups. Furthermore, there were no significant differences between the two groups in terms of the proportion of women who were pregnant or who had a baby in the past year.

There was also tremendous similarity in the housing histories of these two sub-groups, save for the fact that one had previously used emergency shelter. Repeat shelter users were not more likely to have been doubled up last year and they were only slightly more likely to have ever been doubled up. New users were as likely as repeat users to be responsible for all of the rent or none of the rent. Falling behind in rent payments and having been evicted is as typical of the new shelter users as it is of previous users.

Repeat users had, however, moved around considerably more than their new use counterparts during the past several years. Seventy-five percent of the repeat users had moved at least once during the past year, as compared with 49 percent of the new shelter users. Nearly one-third of the repeat users had moved five or more times in the past year, as compared with only 7 percent of the new users. These differences are even more dramatic when the past three years are considered. Fifty-one percent of the repeat users moved five or more times in the past three years, while only 12 percent of new users had experienced that degree of mobility. The difficulty is interpreting this difference. Has the extreme mobility of the repeat use population led to their reliance on emergency housing, or has the shelter system spawned their tremendous mobility?

The number of moves experienced by the repeat users may merely reflect the difficulties faced by HRA in trying to find long-term placements for homeless families; multiple moves may reflect moves within the shelter system. Or, it also is possible that the kind of chronic homelessness exemplified by repeat shelter use (as contrasted with single episode homelessness) results from a high degree of family mobility.

The repeat users also differ from the new users in regard to a series of health-related factors. Repeat users are more likely than new users to report health problems. For those aged 25 and under, 10 percent of new users and 20 percent of repeat users reported such problems. Those who had previously been sheltered were twice as likely to report nervous problems and problems with substance abuse. As with mobility, however, there are difficulties associated with the interpretation of these findings. It is not clear whether these problems were the result of the previous episode of homelessness or whether preexisting problems have made it more difficult for families to extricate themselves permanently from homelessness.

It is difficult to identify or describe two paths to homelessness that are distinctive for repeat users of the emergency shelter system and for those who are using it for the first time. However, the issues of excessive mobility and increased rates of health and substance problems are cause for concern. To what degree is the emergency shelter system contributing to the emergence of a new group of chronically homeless families? To what degree can services within the emergency shelter system be bolstered to prevent repeat visits? And if health and mental problems are associated with repeat shelter use, how can we address these problems to lessen their link with homelessness?

IX. CONCLUSIONS

The survey information presented in this report represents significant new knowledge that is available to City officials and others concerned about the problems of homelessness among New York City families. This information can be used by City officials to better target efforts to provide services that can prevent episodes of shelter use by families. However, in addition to being key ingredients to a forecasting model, the survey information allows for a comprehensive portrait of New York City's homeless family population. Importantly, the data set represents one of the first large scale data sets that can be used to compare characteristics of public assistance families which use emergency housing and characteristics of the general population of public assistance families.

Comparisons of public assistance families which become homeless and public assistance families which do not results in the identification of key risk factors that public officials can focus on when planning initiatives to reduce the need for emergency housing among poor families. The analysis presented in the report identifies a series of factors that clearly put some families at high risks of entering the City shelter system.

Some of the most important risk factors to emerge include:

* not having one's own place to live, especially if one has never been a primary tenant of an apartment,

* past use of the shelter system,

* frequent moves and recent moves,

* current pregnancy and recent childbearing, and

* presence of what we term disruptive social experiences either as a child or as an adult.

Although the survey data identify these factors as ones which are strikingly different for the two populations we have studied, a result that may be just as important is the overwhelmingly consistent finding that on almost every measure of "well offness" or ability to function independently, homeless families are in somewhat worse shape than the housed public assistance population. Although the differences in the two groups are not dramatic for many of the individual measures, the cumulative effects of the higher incidence of numerous problems may be the major cause of many families' inability to cope with housing arrangements without city support.

One final significant finding which we think needs constant reiteration emerges from the analysis presented in the "Pathways section (Section 8). The survey brings into focus not one large group of homeless families but at least five distinct categories of homeless families. Each type of family follows a distinct pathway to homelessness and probably will require distinct social interventions to reduce the incidence of their homelessness. As with so many social problems in a large city like New York, the problem of homelessness among poor families is not just one problem but a series of problems each with a distinct source and a distinct set of solutions.

The five types of families that seem to experience different strains of the homelessness problem are:

* The evicted homeless, who had their own place to stay but were evicted or left because of rent problems (18 percent of the total);

* Recent primary tenants who left their apartments for reasons other than eviction or inability to pay the rent (19 percent of the total);

* Less recent primary tenants who have not had a place of their own in at least one year (19 percent of the total);

* Families who live with the parents of the head of household and have never had a place of their own to live (14 percent of the total); and

* All other families which have never had a place of their own to live (30 percent of the total).

The challenge facing City officials and others concerned with resolving the housing problems of low income New Yorkers is to design policy initiatives that meet the needs of each type of homeless families. We need not one solution to this problem, but a series of strategies tailored to distinct subsets of families who are on the distinct pathways to homelessness. It is our hope that the findings of this project will help City officials design effective social interventions that can make stable housing a reality for all New Yorkers.

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FORECASTING MODELS TO TARGET FAMILIES AT HIGH RISK OF HOMELESSNESS
(FINAL REPORT: VOLUME 3)

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September 1, 1989

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NOTE ON STRUCTURE OF THE REPORT

This report is one volume of the Final Report for the New York University Study of Homeless Families that has been conducted for the New York City Human Resources Administration. The Final Report is comprised of four distinct volumes:

Volume 1: A STUDY OF HOMELESS FAMILIES IN NEW YORK CITY: RISK ASSESSMENT MODELS AND STRATEGIES FOR PREVENTION.

Volume 2: A STUDY OF HOMELESS FAMILIES IN NEW YORK CITY: CHARACTERISTRICS AND COMPARISONS WITH OTHER PUBLIC ASSISTANCE FAMILIES.

Volume 3: FORECASTING MODELS TO TARGET FAMILIES AT HIGH RISK OF HOMELESSNESS.

Volume 4: IMPLICATIONS OF THE NYU STUDY OF HOMELESS FAMILIES FOR PUBLIC POLICY.

TABLE OF CONTENTS

I. Introduction 1

II. Methodology 5
  Data Set 5
  Weighting 6
  Model Specification 9
  Estimate Approach 10

III. Findings 13
  Weighted Cross Tabulations 13
  Multivariate Analysis 18
  Using the Forecasting Model to Target High Risk Families 23
  Practical Considerations Designing a Forecasting Model 25

IV. Logit Analysis 28

V. Conclusions 33

  Appendix A: Overview of Data Collection Methodology 35
  Appendix B: Glossary 41

I. INTRODUCTION

Why do families become homeless in New York City and become reliant on the City's emergency housing system? Why do other families which have low incomes and are on public assistance manage to remain in apartments? Is there any way to identify in advance which families are going to require City shelters in the near future, and then to design interventions to head off these episodes of homelessness?

This report addresses questions like these as part of a comprehensive analysis of factors that are related to families' use of public shelters in New York City. On any given night, between 4,000 and 5,000 New York City families stay in City shelters; during a given year, it is estimated that between 7,000 and 10,000 different families that are on public assistance use the emergency housing system for some period of time.

The most important underlying cause of this large incidence of homelessness among families is the acute shortage of low-income housing in the City. The City has recently begun to rehabilitate low income housing at a faster rate, but the prospects of expanding housing so that shelters are no longer necessary are dim at least in the short run. Because of this, it is important for the City to think about what other initiatives might reduce the numbers of families that must rely on emergency housing.

An important first step in developing policies that might prevent the need for shelter use is to better understand the dynamics that lead to homelessness among New York City families. An understanding of the correlates of homelessness may provide insight into what types of initiatives would be effective in reducing the need for emergency housing.

Another important reason for understanding the correlates of homelessness is that an ability to forecast which families are at high risk of becoming homeless will permit effective targeting of preventive service initiatives on those families at high risk of needing emergency housing. With over 200,000 families relying on public assistance in New York City, it would be expensive to deliver preventive services to the entire public assistance population. Rather, it is necessary to target preventive services on a smaller subset of families that are at high risk of becoming homeless.

This report focuses on the development of statistical models that can be used to forecast which New York families are at high risk of becoming homeless and requiring emergency housing. The purpose of this exercise in forecasting is to develop a method for identifying in advance families that are likely to be shelter users in the near future. Such a targeting methodology would improve the City's ability to develop cost-effective preventive service programs to alleviate some of the problems that are causing high risk families to need emergency housing.

The Human Resources Administration had developed some forecasting models prior to the start of this project. The agency found that 12 percent of families on public assistance have one or both of the following characteristics: they have moved two or more times since their welfare case opened and they have had their case closed for administrative reasons (e.g., failure to follow procedures) two or more times. If a target group of these families is formed, it turns out that 42 percent of all homeless families would be in that target group. That is, 42 percent of homeless families have one or both of the two forecasting factors considered.

The question posed for this project is whether additional data analysis and more sophisticated forecasting models could reduce the size of the public assistance target group and, at the same time, either keep the percentage of homeless families the same or actually increase the total number of homeless families successfully targeted. More accurate targeting is important because it is generally not feasible to provide extensive preventive service programs to large numbers of families. To effectively target resources, it is important to form target groups that are comprised predominantly of families that are at high risk of shelter use.

The next section of the report reviews the methods used in the analysis. Following this methods section is a descriptive analysis that compares characteristics of families that use the emergency housing system and families that are on public assistance but do not use the shelter system. The report then turns to a description of the findings related to the forecasting models and a discussion of how the models can be used to target high risk families.

II. METHODOLOGY

Data Set

To develop statistical models to forecast which public assistance families are at high risk of becoming homeless, it is necessary to have a data set that includes a subsample of families that are homeless and a comparison subsample of families that are on public assistance but have managed to remain out of the emergency housing system. For each of the sampled families, it is important to measure characteristics that are expected to correlate with the use of emergency housing.

For this study, we developed such a data set by interviewing 704 families who were homeless and applying for emergency housing and a comparison sample of 524 "housed" public assistance families. A twenty-five minute in-person survey was conducted with each family in the sample; these surveys were done by Louis Harris and Associates at Emergency Assistance Units (EAUs) and Income Maintenance Centers (IMCs) during the first seven months of 1988.

The survey data collected extensive information about each family concerning the following:

* Housing History;
* Pregnancy and Parenting Experiences;
* Health Mental Health and Substance Abuse Problems;
* Welfare, Employment, and Education Patterns; and
* Social Relationships.

In addition, we added information from the administrative records of HRA to the data set in order to include some measures concerning the impacts of the public assistance system on risk of homelessness. These administrative factors included frequencies of case closings, the length of time on public assistance, recoupment policies, and frequencies of bonus payments when spouses make support payments. Because administrative records could not be matched for 131 families, when doing analysis that includes the administrative variables, sample sizes are 1,097 rather than 1,228.

Each family in the sample was either on public assistance or had been on public assistance within six months of the interview. The study is restricted to public assistance families--even though between 10 percent and 15 percent of those requesting shelter at EAUs are not on public assistance--because it is the public assistance population which is known to HRA and which can be targeted in advance for special preventive services. Thus, this is the population for whom preventive service programs are a possibility.

The survey methods used to collect the data are described in volume two of this Final Report. Rather than repeat the data collection strategy here, the relevant pages from the companion report are included as Appendix A of this report.

WEIGHTING

The key statistical issue that had to be addressed to use our survey data to formulate a forecasting model is that our sample is a "choice based" sample. That is, we selected our sample based on whether a family was seeking emergency housing (this is one value of our model's "dependent" variable) or whether a family was not seeking emergency housing (this is the other value of our "dependent" variable).

Given this sampling strategy, we clearly could not compute probabilities of homelessness for the population of public assistance families based on the raw data from our sample. Fifty nine percent of our sample was homeless while approximately three percent of the general public assistance population seeks emergency housing during a given year.

Fortunately, oversampling of a subpopulation is a common procedure in studies like ours. This approach often is used to study rare events such as the incidence of cancer or heart disease, and the classic example of the use of choice based samples is the study of why some people choose buses and others choose trains or automobiles for commuting.

To properly adjust the data for use in a forecasting model, it is necessary to weight the data for each family to reflect the actual probability that the family would have been sampled had a simple random sample been chosen. To develop these weights, it is necessary to have some approximations of the actual incidence of homelessness in the population under study.

To develop our weights, we made the following assumptions: 1) At any point in time, there are approximately 5,000 homeless families served by the City's emergency housing system. Over the course of a year, we assume that 10,000 distinct families spend some amount of time in emergency housing.

2) There are approximately 250,000 public assistance families at any point in time, and approximately 290,000 families in New York City spend some time on public assistance in a twelve month period. Thus, the 10,000 emergency shelter users represent 3.33 percent of the general public assistance population.

A similar estimate of the risk of shelter use for the general assistance population can be obtained from our comparison sample. Among the 524 public assistance families in our sample, three percent had spent some time in a public shelter during the twelve months prior to the interview. The fact that two independent approaches to estimating the population weights lead to almost identical estimates increases our confidence in the accuracy of the weights.

Given these assumptions (our weights can easily be changed if other assumptions are more appropriate; small changes in the weights will have small effects on parameter estimates but should not affect the overall pattern of our findings), each of our EAU sample families are weighted by a factor of .058. This weight reflects the ratio of expected homeless families in a random sample (.033*1228) to the actual number of homeless families sampled (704): .058 = (.033*1228)/704. In the case of the public assistance comparison sample, the weight is 2.265 which is the ratio of expected "housed" families in a random sample

(.967*1228) to the actual number of "housed" families sampled (524): 2.265 = (.967*1228)/524.

In the analysis presented in this report, all findings are weighted by these factors. The result of the weighting factor is 1) to maintain the original degrees of freedom in our data set (1228), 2) to take advantage of the enhanced statistical power that results from greatly oversampling homeless families, and (3) to estimate a model that reflects the actual risks of homelessness among subgroups of the public assistance population.

MODEL SPECIFICATION

Our data set includes a large array of variables that are potential correlates of homelessness. Each of these variables was included in the survey based on a priori hypotheses about the causes of shelter use. It would be very cumbersome to include each and every possible predictor of homelessness in the model at one time. To explore the various hypotheses that are generated from our earlier reports, we adopted the following systematic approach to hypothesis testing:

1) Based on a review of our earlier descriptive analysis, we identified eighteen variables that we expected to be the most important predictors of homelessness. We estimated the model with all of these variables included as independent variables and with the dependent variable measured as a "one" for the EAU sample of shelter requesters and measured as a "zero" for the comparison sample of "housed" public assistance families. (This equation is referred to as BASIC 1).

2) We eliminated insignificant independent variables from BASIC 1 except in the case of age and ethnicity, which we considered essential adjustment variables. The resulting equation is referred to as BASIC 2.

3) We added one additional independent variable at a time to BASIC 2 to explore which of the other seventeen potential

correlates of homelessness might be significant. All additional independent variables that were statistically significant (at the 90% level) were added to the equation to form BASIC 3. We then went back and again looked at each of original twenty variables (from BASIC 1) that were eliminated from BASIC ~~1 to~~ see if any of these are significant when added to BASIC 3.

The findings presented in the report are for the final equation (BASIC 3); this model is often referred to in our reports as the "complete" model. In the text, we also sometimes refer to additional equations that added independent variables to BASIC 3 one at a time. It should be noted, however, that the estimated parameters are relatively stable across different specifications of the model. In addition, the final form of the model closely resembles our initial "best guess" at key variables. Twelve of the fifteen variables that appear in BASIC 3 were included in BASIC 1.

ESTIMATION APPROACH

In this report, we focus principally on weighted ordinary least squares estimation approaches for the statistical models. Even with choice based samples and dichotomous dependent variables, ordinary least squares results in "consistent" parameter estimates for the regression coefficients. The least squares procedure is usually not the preferred estimation method for dichotomous dependent variables partly because the variances of the regression coefficients are generally larger than occurs with other estimation approaches (i.e., we lose some statistical power by using least squares). In addition, the linear model implied by least squares can result in forecasts of probabilities of homelessness greater than one or less than zero.

Because of these potential problems, we also have estimated the forecasting model using weighted logistic regression analysis. This non-linear forecasting model has the important feature that the estimated impacts of any given variable on the risk of homelessness vary depending on the baseline estimate of risk. Marginal impacts of specific factors are smaller for families at very low risk of homelessness and at very high risk of homelessness.

We generally report the least squares findings in this report in part because they are the clearest multivariate analysis that is possible. The resulting coefficients are easy to interpret and to understand, and give a good overall indication of what variables are the best predictors of homelessness in a multivariate context. In addition, as explained later in the findings sections, we did not find any substantial differences in the accuracy of the two models in terms of identifying high risk target groups. Thus, from a practical perspective, it does not make much difference which of the two models are used for targeting.

The next section of the report outlines our findings. We start with a presentation of the simple weighted cross tabulations that indicate the relative risk of homelessness for discrete subgroups of the public assistance population. After presenting cross tabulation results, we present an overview of the findings for the multivariate model of predictors of homelessness. Following this overview, we explore the findings in some more detail for each type of predictor variable: 1) housing, 2) parenting, 3) health, mental health, and substance abuse, 4) work, education, and welfare history, and 5) social supports and disruptive experiences, and 6) administrative records. The final sections of the report explain how the statistical model can be used for forecasting and for identifying high risk target groups among the public assistance population.

One important caveat concerning our analysis is that the sample of homeless families is comprised of individuals who present themselves at the EAUs and request shelter. A small number of families seeking shelter at the EAUs either do not wait the two or more hours it takes to obtain an assignment or never show up at the assigned shelter for one reason or another (sometimes because they do not like the place assigned). In a strict sense, therefore, our analysis compares shelter requesters to the comparison sample of housed families rather than shelter users and a comparison sample.

A related caveat is that our analysis treats the two samples (EAU and IMC) as if they were "stocks" that do not "flow" from status to status. In fact, over time families flow from one sample (housed public assistance families) to the other sample (shelter requesters) and back again. The analysis we present focuses on the question: if you consider a population of public assistance families at a given point in time, which ones are likely to request shelter in the next twelve months?

III. FINDINGS

Weighted Cross Tabulations

As a transition from the descriptive findings presented in volume 2 of the Final Report to the analytical findings that are presented here, this section presents unadjusted cross tabulations for each forecasting variable under consideration for the EAU (homeless) sample and the Income Maintenance Center (IMC) sample of comparison families. Table 1 presents the cross tabulations for the unweighted data and then for the weighted data. The weighted data are presented in the form of probabilities of shelter use for subgroups of families defined by each forecasting characteristic. The unweighted data represent the sample distributions for each variable and are identical to the findings presented in the earlier report.

The unweighted and weighted data are intrinsically interrelated. Whenever the sampling distributions of the unweighted data are substantially different for the two samples, the probability of shelter use differs substantially depending on which subgroup a family is in. The differences in probability of shelter use are largest when a very small percentage of the comparison sample is in the high risk group while a larger percentage of the EAU sample is in the risk group. Such factors, of course, will be the best predictors of homelessness because they will have the important characteristic of minimizing Type II error (i.e., false positives).

Table 1
Descriptive Statistics for Potential Predictors of Homelessness

	SAMPLE DISTRIBUTION		PROBABILITY OF SHELTER USE
	EAU	INC	
HOUSING:			
PRIMARY TENANTS AT PLACE STAYED LONGEST LAST YEAR	36.5%	85.5%**	15.0%**
ONCE WERE PRIMARY TENANTS BUT NOT AT PLACE STAYED LONGEST LAST YEAR	19.0%	2.7%	19.7%
NEVER HAVE BEEN PRIMARY TENANTS:			
STAYED WITH PARENTS FOR LONGEST PERIOD LAST YEAR	14.3%	6.1%	7.5%
STAYED WITH OTHERS FOR LONGEST PERIOD LAST YEAR	30.2%	5.7%	15.4%
MORE THAN 3 PERSONS PER BEDROOM LAST YEAR	83.5%	74.4%**	3.7%
NOT LIVED IN CROWDED SITUATION	16.5%	25.6%	2.2%
REGULATED HOUSING: HPD, PROJECTS, SECTION 8	7.5%	27.9%**	9.0%*
NON-REGULATED HOUSING	92.5%	72.1%	4.2%
LIVED IN A RENT CONTROLLED APARTMENT	21.4%	47.9%**	1.5%**
DID NOT LIVE IN RENT CONTROLLED APARTMENT	78.6%	52.1%	4.9%
MOVED AT LEAST TWICE WITHIN PAST YEAR	31.4%	5.0%**	17.9%**
MOVED ONE TIME OR LESS IN PAST YEAR	68.6%	95.0%	2.4%
HAVE BEEN DOUBLED-UP LIVING WITH OTHERS AT SOME TIME SINCE HAVING CHILDREN	81.1%	38.2%**	6.8%**
HAVE NEVER BEEN DOUBLED-UP	18.9%	61.8%	1.0%
EVER EVICTED	23.3%	7.1%**	10.2%**
NEVER EVICTED	76.7%	92.9%	2.8%
EVER LATE IN RENT PAYMENTS FOR 2+ MONTHS	22.9%	21.6%**	3.5%
NEVER LATE IN RENT PAYMENTS	64.5%	71.7%	2.4%
NEVER HAVE PAID RENT	12.6%	6.7%	6.1%
EVER TWO OR MORE POOR BUILDING CONDITIONS	46.6%	37.8%**	4.1%
ONE OR LESS POOR BUILDING CONDITIONS	53.4%	62.2%	2.9%
PREVIOUS SHELTER USE	31.5%	7.6%**	12.4%**
NO PRIOR SHELTER	68.5%	92.4%	2.5%
PARENTING:			
PREGNANT	34.5%	5.5%**	17.7%**
NOT PREGNANT	65.5%	94.5%	2.3%
HAD A BABY WITHIN PAST YEAR	26.0%	10.7%**	7.7%**
NO NEW CHILD	74.0%	89.3%	2.8%
HAD A CHILD BEFORE AGE 18	36.8%	23.7%**	5.0%*
DID NOT HAVE CHILDREN BEFORE AGE 18	63.2%	76.3%	2.8%
HEALTH, MENTAL HEALTH AND SUBSTANCE ABUSE:			
HEALTH PROBLEM LAST YEAR	17.5%	23.1%**	2.5%
NO HEALTH PROBLEM	82.5%	76.9%	3.6%
TOOK YOUNGEST FOR A WELL CHILD EXAM IN PAST YEAR	78.6%	72.5%**	3.6%
NO WELL CHILD EXAM	21.4%	27.5%	2.6%
NERVOUS PROBLEM LAST YEAR	10.4%	16.0%**	2.2%
NO NERVOUS PROBLEM	89.6%	84.0%	3.5%
OVERNIGHT ADMISSION TO MENTAL HOSPITAL	4.1%	1.0%**	12.9%*
NEVER ADMITTED TO MENTAL HOSPITAL	95.9%	99.0%	3.2%
REPORTED PROBLEM WITH SUBSTANCE ABUSE IN PAST 6 MONTHS	4.8%	1.1%**	12.7%**
DID NOT REPORT A PROBLEM	95.2%	98.9%	3.2%
EVER PATIENT IN DETOX CENTER FOR DRUG OR ALCOHOL ABUSE	8.2%	1.9%**	12.9%**
NEVER DETOX PATIENT	91.8%	98.1%	3.1%

Table 1 (con't.)

Descriptive Statistics for Potential Predictors of Homelessness

	SAMPLE DISTRIBUTION		PROBABILITY OF SHELTER USE
	EAU	IMC	
EDUCATION, WORK AND WELFARE:			
COMPLETED 12 OR MORE YEARS OF EDUCATION	39.6%	36.8%	3.6%
COMPLETED FEWER THAN 12 YEARS	60.4%	63.2%	3.2%
WORKED FULL-TIME FOR ONE YEAR OR MORE	33.4%	40.1%**	2.8%
NO FULL-TIME WORK	66.6%	59.9%	3.7%
PARENTS WERE ON PUBLIC ASSISTANCE	51.8%	31.1%**	5.4%**
PARENTS WERE NOT ON PUBLIC ASSISTANCE	48.2%	68.9%	2.3%
EVER HAD A SSC CASEWORKER	8.9%	1.7%**	15.2%**
NEVER HAD A SSC CASEWORKER	91.1%	98.3%	3.1%
CURRENTLY ENROLLED IN WIC - NEW BABY OR PREGNANT	24.3%	9.5%**	8.1%**
NOT ENROLLED - NEW BABY OR PREGNANT	30.4%	6.3%	14.2%
NO NEW BABY OR NOT PREGNANT	45.3%	84.2%	1.8%
SOCIAL SUPPORTS:			
THREE OR MORE DISRUPTIVE SOCIAL EXPERIENCES	18.5%	3.4%**	15.6%**
LESS THAN THREE DISRUPTIVE EXPERIENCES	81.5%	96.6%	2.8%
PARENTS TOLD YOU TO LEAVE WITHIN PAST YEAR	15.1%	1.1%**	31.1%**
NOT TOLD TO LEAVE	84.9%	98.9%	2.9%
DEMOGRAPHICS:			
30 YEARS OF AGE AND YOUNGER	72.0%	38.5%**	6.0%**
OVER 30 YEARS OF AGE	28.0%	61.5%	1.5%
BLACK	54.0%	31.9%**	5.5%**
HISPANIC	39.5%	59.5%	2.2%
OTHER RACE	6.5%	8.6%	2.6%
ADMINISTRATIVE VARIABLES:			
TWO OR MORE ADMINISTRATIVE CLOSINGS	56.2%	28.2%**	6.2%**
NONE OR ONE CLOSING	43.8%	71.8%	2.0%
FAMILY CURRENTLY HAS ASSISTANCE CHECK REDUCED TO REPAY HRA FOR ADVANCED PAYMENTS	2.8%	2.5%	3.5%
FAMILY NOT CURRENTLY BEING RECOUPED	91.2%	97.5%	3.2%
FAMILY RECEIVES BONUS PAYMENT FOR SUPPORT PAYMENTS	2.4%	12.3%**	0.6%**
NO BONUS PAYMENT DUE	97.6%	87.7%	3.5%
HOUSEHOLD HEAD UNDER 30:			
FAMILY ON WELFARE FOR FIVE OR MORE YEARS	37.7%	44.4%**	5.0%
FAMILY ON WELFARE FOR UNDER FIVE YEARS	62.3%	55.6%	6.5%
HOUSEHOLD HEAD OVER 30:			
FAMILY ON WELFARE FOR FIVE OR MORE YEARS	25.4%	36.4%**	1.2%
FAMILY ON WELFARE FOR UNDER FIVE YEARS	74.6%	63.4%	2.0%

* p<.1 for chi square test of significance for differences in percentages across samples.
** p<.05 for chi square test of significance for differences in percentages across samples.

Sample sizes: EAU: 704, IMC: 524. For administrative variables, data could not be obtained for 131 families; sample sizes are: EAU: 618, IMC: 479.

Source: Health Research Program tabulations from HRA administrative records and the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

In reviewing the probabilities of shelter use reported in Table 1, it is important to remember that the probabilities do not adjust for other potential causes of homelessness. Thus, it is possible that some factors that appear to differentiate the sample in terms of risk of homelessness are really proxies for other factors. This possibility is explored in the multivariate analyses reported later in this report.

The housing variables include some of the most important predictors of homelessness. Having experienced multiple moves in the past year, having ever been doubled up with others, having ever been evicted, having used city shelters previously, and not living at one's own place last year are all strong predictors of shelter use for our sample. For example, 17.9 percent of families who moved two or more times during the past year seek emergency housing compared to just 2.4 percent of other families. Families who have ever been evicted have a 10.2 percent chance of seeking shelter, previous shelter users have a 12.4 percent risk, and individuals who once were primary tenants but lived with others last year have a 19.7 percent risk.

In the companion report, we found that former primary tenants who had to double up last year and families which had never had their own place to live seemed to be at highest risk of needing emergency housing. This earlier finding is clearly confirmed in the weighted analysis reported in Table 1. In addition, in this report, we divide families who have never had their own place to live into two subgroups: those who lived with their parents last year and those who lived with others. Families who lived with others are at much higher risk (19.7 percent) of seeking emergency housing than families who lived with their parents (7.5 percent risk).

In the simple weighted cross tab analysis, we found two other housing variables which categorize families into groups that have significantly different risks of seeking emergency housing. These concern the type of housing in which the family lived. Those who lived in Section 8 or HPD housing or the projects were at lower risk, as were those who lived in rent controlled apartments. Three other housing factors turned out not to differentiate risk of homelessness. These were: crowding in the place stayed longest last year; having ever lived in buildings with two or more serious building problems (e.g., rats); and having fallen behind in rent payments.

All three of the parenting variables we considered distinguish subgroups with different risks of homelessness. Most dramatic is the finding that pregnant women have a 17.7 percent chance of seeking shelter compared to just a 2.3 percent chance for families headed by non-pregnant women. This finding is quite striking in its implication that 17.7 percent of all public assistance families which have a pregnant mother as its head seek shelter during the course of the pregnancy. As emphasized in the companion report, it is not possible with our data to determine whether HRA policies (which at the time of our survey gave preferential treatment to pregnant women in terms of placements) cause this pattern or whether the circumstances of pregnant women actually lead to such increased risk of homelessness.

Women who had a baby within the past year also are at increased risk of seeking emergency housing but the 7.7 percent rate among this subgroup is much smaller than the 17.7 percent chance of using emergency housing found for the pregnant mother subgroup. The other parenting variable is having a child while still a teenager. This subgroup has a 5.0 percent risk of shelter use compared to a 2.8 percent risk for mothers who were not teen parents. This difference is significant at the six percent confidence level.

Most of the variables that measure health status did not significantly distinguish sample subgroups in terms of risk of homelessness. However, variables concerning issues of mental health and substance abuse proved to be more relevant. Having spent at least one night in a mental hospital leads to a 12.9 percent risk of homelessness. Reporting prior enrollment in a detox program for drug or alcohol abuse leads to an 11.1 percent risk of homelessness, while reporting a recent problem with substance abuse leads to a risk of 12.7 percent.

Previous work experience does not affect risk of homelessness, but having had parents who also were on public assistance almost doubles a family's risk of becoming homeless (5.4 percent vs 2.3 percent). In addition, having been assigned a SSC worker leads to a high risk of seeking emergency housing

(15.2 percent). Lower educational attainment is not associated with increased risk.

Social experience factors are also considered in our analysis. These variables include nine factors that assess different disruptive experiences that an individual could have experienced as a child or as an adult. After assessing the intercorrelations, we developed a simple index that counts the number of these experiences. The forecasting variable we specify distinguishes individuals who have three or more of these experiences from those who have had two or fewer. As reported in Table 1, having had more than two of these experiences greatly increases a family's risk of homelessness from 2.8 percent to 15.6 percent. Also, families who were told to leave by their parents (i.e., by the respondent's parents) were at dramatically increased risk. However, these results may be misleading since for many families being asked to leave is the proximate event to requesting shelter.

Variables taken from HRA's administrative records were also analyzed. Only bonus payments and frequent administrative closings effectively distinguish the housed and homeless samples. As indicated in Table 1, families with two or more administrative closings have a 6.2 percent probability of shelter use, as compared with 2.0 percent of those who had only one or none. Families receiving bonus payments (because of child support payments) have their risk of shelter use decreased from 3.5 percent to .6 percent. Neither length of time on public assistance or currently having funds recouped by the agency are associated with increased risk of homelessness.

Multivariate Analysis

The multivariate analysis uses multiple regression statistical techniques to assess the independent effects of each potential forecasting variable on the likelihood of seeking shelter. In measuring the effects of any given variable, the impacts of other possible forecasting variables are held constant. Thus, in a multivariate context, we can be relatively confident that significant variables are significant because of the factor measured and that variables are not just proxying other factors.

As explained in the methods section, the initial model we present includes variables that were found to be significant on earlier iterations of our analyses. This model includes fifteen distinct factors, which are defined in the Glossary (Appendix B). The other twenty factors that we considered do not have a significant impact on risk of homelessness. In addition, the coefficients and significance for each variable included in the initial or basic model change minutely when each of the other twenty insignificant variables are added to the model.

Table 2 presents our findings for the complete model and for a set of models that use fewer variables than the complete model. The findings for each set of variables are discussed in the following paragraphs.

TABLE 2

Predictors of Homelessness: Weighted Least Squares Model for Full Sample

Variables	Complete Model	Admin Data Model	Survey Data Model	"Easy" Data Model
Previous Primary Tenant	0.10 *	----	0.11 *	----
Stayed with Parents	0.02	----	0.01	----
Stayed with Others	0.08 *	----	0.07 *	----
Two Moves	0.06 *	0.12 *	0.06 *	----
Ever Evicted	0.04 ***	----	0.04	----
Ever Doubled	0.02	----	0.02	----
Prior Shelter	0.04 **	0.07 *	0.04 **	0.08 **
Ever Detox	0.08 **	----	0.09 **	0.09 *
Ever SSC	0.02	0.04 **	0.05	0.03 *
Disruptions	0.09 *	----	0.09 *	----
Current Pregnancy	0.10 *	----	0.11 *	0.12 *
Baby Past Year	0.03	----	0.03	0.04 **
Age (linear)	-0.0004	----	-0.004	-0.001 **
Hispanic	-0.01	----	-0.02	----
White/other	-0.02	----	-0.02	----
Freq Close	0.01	0.03 *	----	----
Bonus Adm	-0.01	-0.02	----	-0.02
Recoupad	0.01	0.003	----	-0.004
Foster	----	----	----	0.04
Institution	----	----	----	0.05
Constant	0.01 **	0.01 **	0.01	0.05 **
R	0.14	0.07	0.14	0.09

* p < .01
** p < .05
*** P < .10

Note: All variable except for age are dichotomous. The numbers presented in this table are regression coefficients that measure the change in risk of homelessness for families having the characteristic compared to those who do not. The dependent variable equals one if a family requested shelter (EAU sample) and equals zero if a family was not a requester (IMC=1).

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

See Glossary for variable definitions.

Demographic Factors. The two demographic factors included in the multivariate model are ethnicity (black, Hispanic, other) and age (in the multivariate model, age is included in its linear form). Both of these variables were found to be highly significant in the bivariate cross tabs. For example, those families with a mother under thirty had a 6.0 percent risk of homelessness compared to a 1.5 percent risk for those with a mother over thirty. Blacks have a 5.5 percent risk compared to a 2.2 percent risk for Hispanics in the unadjusted analysis.

In the multivariate analysis, the impacts of both age and race on homelessness disappear. This suggests, as would be expected, that it is not age or race themselves that put a family at risk of homelessness but characteristics of young families and black families relative to other families that lead to differentials in risk. The fact that age and race become insignificant in the multivariate model suggests that our model in fact is measuring those key factors that distinguish the young from the old and blacks from Hispanics in leading to differential rates of homelessness.

Housing History. Previous primary tenants (i.e., those families which lived with others last year but who once had their own place to live) have a risk of homelessness that is ten percentage points greater than the risk for families that were primary tenants at the place where they lived longest last year (Primary tenants are the reference group for the family type variables in the model). Families which never had their own place to live and lived with family or friends but not parents last year have a eight percentage point greater risk of homelessness than the families that were primary tenants.

Interestingly, those families who have never been primary tenants but who live with their parents are not at elevated risk of homelessness. This is one result that is very different than was found in the unadjusted cross tabs. In the unadjusted analysis reported in Table 1, we found that these families had a six percentage point difference in risk of homelessness compared to families that were primary tenants.

Families which have moved two or more times in the past year have a six percentage point greater risk than families which have moved less than two times, and families which have ever been evicted have a four percentage point elevated risk of becoming homeless. Prior shelter users have a four percentage point elevated risk relative to non-users, and those who have been doubled up at some point in the past have a one percentage point elevated risk.

Each of these differences in risk is smaller than in the unadjusted analysis, but the smaller differentials are caused by the intercorrelations in the data. Those at very high risk of shelter use are those who are characterized by multiple risk factors. For example a family which has been doubled up, has been a previous shelter user, has been evicted, and which has moved on multiple occasions has a fifteen percentage point elevated risk of homelessness compared to a family which has none of these four risk factors. Thus, even though each factor has a relatively small impact on shelter use, the model is likely to be useful for forecasting since many families have multiple risk factors.

Pregnancy and Parenting. The variable measuring current pregnancy remains very significant in the multivariate model and indicates that pregnancy increases risk of shelter use by ten percentage points. The "baby in past year" variable, however, loses its significance. This suggests that although having a new baby increases risk of homelessness, it is intercorrelated with other characteristics that are associated with increased risk.

Health, Mental Health, and Substance Abuse. Previous enrollment in a detox program continues to be a good predictor of shelter use in the multivariate model. Those who have used a detox program are eight percentage points more likely to use the shelter system than others. Having spent at least one night in a mental hospital leads to an eight percentage point higher risk of homelessness. This variable is not included in Table 2 because its significance is very sensitive to what other variables are in the model. When the mental hospital use variable is added to the fifteen variables listed in Table 2, its coefficient is significant at the .10 confidence level. As in the unadjusted analysis, none of the health status or health care utilization variables are significant forecasters of shelter use.

Work, Education, and Welfare History. The various work experience and education level variables analyzed were uniformly insignificant as predictors of shelter use. In addition, having had a parent on welfare does not remain significant in the multivariate analysis. The only factor in this group of variables that is significant is previous experience with SSC. Those who have ever been assigned a SSC caseworker have a seven percentage point elevated risk of becoming homeless.

Social Supports and Disruptive Experiences. The variable that distinguishes families who have had three or more disruptive social experiences from those with fewer than three such experiences is very significant in the multivariate model. Having had three or more disruptive experiences elevates risk of homelessness by nine percentage points. Social support variables, such as having a close relative in New York City, did not significantly impact on a family's risk.

Administrative Variables. Of note, frequent administrative closings and bonus payments, both of which had effectively distinguished homeless and housed families in the bivariate analyses, are no longer significant in the multivariate model. It appears that administrative closings are associated with increased risk of homelessness because such closings are highly correlated with other risk factors, such as frequent moves. In the case of bonus payments, the extremely small number of cases receiving such payments results in its statistical insignificance.

Using the Forecasting Model to Target High Risk Families

Once estimated, the forecasting model can be used to target which families are at highest risk of becoming homeless. This is done by considering the predicting characteristics of each given family and calculating, using the parameters of the model, the forecasted probability or risk of using the shelter system for each family. A target group is formed by choosing some cut-off risk level, and deciding that families with a predicted risk above the cut-off level should be in the target group. Unless a forecasting model is perfectly accurate, any target group will include some families which are predicted to be at high risk but which would never actually use the shelter system. In addition, some future shelter users are likely to be misjudged by the forecast model and not end up in the target group. A key question in evaluating alternative forecasting models is the accuracy of the model in forming as small a target group as possible that includes a large portion of future homeless families. Accuracy can be judged in one of two ways:

* having to target as small a number of public assistance families as possible in order to have some specified percentage of all homeless families included in the target group (e.g., a model that identifies 5% of the public assistance population at high risk would be considered more accurate than a model that identifies 10% of the public assistance population at high risk, if both models in fact include 50% of all homeless families in the group targeted).

* having the highest possible percentage of all homeless families in a target group of a given size (e.g., if two models both target 3% of the public assistance population as high risk families, the model that includes 40% of all homeless families would be considered more accurate than a model that includes just 30% of all homeless families in the target group).

How accurate is the "complete model" discussed above? Table 3 presents the relevant statistics for assessing accuracy (the relevant findings for this discussion are those reported for the "complete" model). Using the first definition, it turns out that 5 percent of all public assistance families need to be targeted in order to have half of the families that will request emergency housing during a twelve month period included in the target group. A related statistic is that of all families in such a target group, 30 percent will be future homeless families (in the absence of some intervention).

Table 3 also demonstrates that when the target group is made smaller (for example, 3 percent of the public assistance family population), the percentage of all homeless families in the target group decreases (to 42 percent). However, the composition of the target group becomes more concentrated with homeless families as the target group becomes smaller. When the target group includes 3 percent of the public assistance population, 42 percent of the target group (compared to 30 percent in the case of the larger target group) are families that would be expected to become homeless over a 12 month period.

TABLE 3

Percentage of PA Population That Must Be Targeted to Identify 50% of Homeless Families

Models:	
Admin. Only	13%
Easy to Obtain	9%
Complete Model	5%

*In some cases slightly more or less than 50% are targeted

Percentage of Homeless Families Identified When Target Group is 5% and 3% of PA Population by Model

	Percentage of PA Families Targeted	
	5%	3%
Admin. Only	35%	24%
Easy to Obtain	38%	30%
Complete Model	51%	42%

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

The choice of how large a target group to select will depend on the policy goals of HRA. As the target group increases in size, more high risk families will be found. However, services will have to be provided to substantially more families that would not have become homeless in the absence of these services.

Practical Considerations Designing a Forecasting Model

Tables 3 and 4 report further analysis which addresses an important practical concern in judging the accuracy of forecasting models. In general, models become more accurate as more variables are added to the forecasting equations. An important question, however, is whether the increased accuracy is substantial and worth the effort needed to collect a long list of data elements.

We explored this question by re-estimating the forecasting model with various subsets of the variables. We reformulated the model so that it just includes administrative data that would involve no new data collection, and we reformulated the model so that it just uses data elements that are relatively easy to collect. Some of the variables in the "easy" model would require new questioning of clients, but they are not sensitive questions and could be included in recertification interviews. We judged that just some of the administrative data variables are easy to use because a great deal of file manipulation is required to obtain variables such as residential moves and administrative closings.

Table 2 presents the estimated parameters of these smaller forecasting models, and Table 3 presents statistics that allow for comparisons of the accuracy of the smaller models and the complete model. Unfortunately, the smaller models do not perform nearly as well as the complete model. If 5 percent of the public assistance population is targeted using the administrative data model, just 35 percent of all homeless families are included in the target group compared to the 51 percent coverage found with the complete model. The model that uses the easy-to-obtain data performs just slightly better than the administrative data model.

Prior to the start of this project, HRA staff had explored the use of some simple forecasting approaches using two administrative data variables: two or more residential moves and two or more administrative closings. This forecasting model identified 42 percent of all homeless families when 12 percent of the public assistance population is targeted. A good judge of the improvement in forecasting capacity that results from this project's survey data is the finding in Table 4 that the "complete" model can identify the same percentage of homeless families as the two variable model, but the target group can be one quarter the size of the 12 percent group required with the simple model. In terms of actual numbers, this means that when we consider the entire public assistance population of approximately 230,000 families, the high risk target group could be reduced from approximately 28,000 public assistance families (when the simple model is used) to approximately 7,500 families (when the "complete" model is used) and in each case the number of homeless families in the target group would be approximately 4,200. Thus, just 15 percent of the large target group would be families on the pathways to homelessness; for the smaller group, 56 percent of the families would be on the pathways to homelessness.

The final decision regarding the trade-off between ease of implementation and effectiveness at targeting those at risk must be made by officials at HRA. We believe that there is convincing evidence to suggest that with limited effort, a multivariate algorithm can be developed and implemented which would allow for more effective targeting and the possibility of preventive services. Although it is now better understood which factors have greatest predictive power, it is essential to balance predictive power of each variable with an assessment of the political and practical feasibility of using such factors for targeting

IV. LOGIT ANALYSIS

The forecasting analysis reported above is based on statistical models using ordinary least squares (OLS) regression techniques. While OLS estimation results in statistically "consistent" estimators, a common alternative estimation procedure is logistic regression analysis. Logistic regression is often considered a more appropriate procedure when the dependent variable is dichotomous because it is based on a model specification that involves nonlinear relationships between each of the independent variables and the dependent variable. Such a nonlinear relationship often is more appropriate given the bounded nature of a dichotomous dependent variable.

To test the sensitivity of the forecasting analysis to the estimation procedure used, we reestimated the forecasting model using logistic regression analysis and compared the new model with the OLS model. While the significance of individual parameters varies substantially across estimation techniques, little difference was found in the ability of the models to forecast homelessness and those families which are targeted.

The estimated coefficients for the logistic model are compared to those for the ordinary least squares regression model in Table 4 (administrative records variables are not included and thus sample sizes are 1,228). Most important in this table is the finding that fewer logit coefficients are statistically significant than OLS coefficients. The reason for this seems to be a greater sensitivity of the logit procedure to

TABLE 4

Predictors of Homelessness: Weighted Least Squares and Weighted Logistic Models

	Least Squares Model		Logistic Model	
Variables	Coefficients	T-ratio	Coefficients	T-ratio
Constant	0.012	0.562	-3.849	-4.391 *
Prior Shelter Use	0.036	1.947	0.392	0.974
Age	0.000	-0.689	-0.035	-1.466
Disruptions	0.077	3.023 *	1.082	1.763
Ever Evicted	0.037	1.988 *	0.807	1.848
Current Pregnancy	0.120	6.019 *	1.782	4.052 *
Baby Past Year	0.026	1.639	0.676	1.524
Ever Detox	0.080	2.395 *	1.832	1.374
Ever SSC	0.058	1.667	0.907	0.969
Ever Doubled	0.024	2.252 *	1.033	2.164 *
Two Moves	0.066	2.941 *	0.582	1.383
Prev. Primary Tenant	0.115	3.967 *	1.707	2.743 *
Stay with Parents	0.013	0.625	0.326	0.561
Stay with Others	0.077	3.645 *	1.375	2.954 *
Hispanic	-0.017	-1.564	-0.620	-1.642
White/Other	-0.022	-1.187	-0.868	-1.228

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

* --Indicates significance at the .05 level.

intercorrelations among the data. Virtually every one of the logit coefficients is significant when slightly smaller versions of the model (i.e., with fewer independent variables) are estimated. The logit coefficients are very sensitive to the inclusion of other correlated variables.

It should be emphasized that the two sets of coefficients reported in Table 4 are not directly comparable. The OLS coefficients reflect the incremental effects of a given variable on the risk of homelessness. Thus, for example, the .036 coefficient on the prior shelter use variable in the OLS model implies that families that had a previous shelter experience (i.e., SHELTER = 1) have a predicted risk of shelter use that is 3.6 percentage points higher than families which have not used shelters in the past.

The coefficients from the logistic regression, however, cannot be interpreted in the same manner as the OLS coefficients because of the non-linear nature of logit analysis. The incremental effects of a given variable on the risk of homelessness depend on the value of other variables for each individual. Because of this, the logit coefficients are used to estimate incremental effects for different types of sample members using appropriate statistical transformations.

The nature of the logistic model is such that incremental effects tend to be small when a given family has characteristics that place it at very low risk of homelessness. However, incremental effects of each variable on risk of homelessness are larger for families that have multiple risk factors.

Table 5 presents the incremental effects of each variable on the risk of homelessness using the logistic model. The incremental effects are calculated for seven subgroups of families: the public assistance comparison sample, families which have been evicted at least once in the past, former shelter users, families headed by females who were pregnant at the time of interview, families which have experienced three or more disruptive events, families which have had contacts with SSC, and families which have experienced at least one episode of being "doubled up."

As expected, the incremental effects of each risk factor are very small for the overall comparison sample. This is because the comparison sample, on average, is at very low risk of homelessness. The interactive specification of the logit model suggests that when few risk factors are present, the marginal effect of any one risk factor is very small. In other words, it seems to take multiple risk factors, all interacting with one another, to increase risk of homelessness. This is seen by comparing the incremental effects of each factor for former shelter users, who tend to have multiple risk factors, with the incremental effects for the overall comparison sample. For the previous shelter users, we find that having been in a detox program increases the risk of new shelter use by 26.6 percentage points. By contrast, for the comparison sample, a detox

TABLE 5
Marginal Effects of Homelessness Risk Factors for Selected Subgroups

Variables	Comparison PA Group	Evicted Families	Former Shelter Users	Pregnant Head of Household	3 or more Disruptive Experiences	Families with SSC Contact	Doubled up Families
Constant	–0.042	–0.251	–0.559	–0.299	–0.502	–0.635	–0.164
Prior Shelter Use	0.004	0.026	0.057	0.030	0.051	0.065	0.017
Age	0.000	–0.002	–0.005	–0.003	–0.005	–0.006	–0.001
Disruptions	0.012	0.071	0.157	0.084	0.141	0.178	0.046
Ever Evicted	0.009	0.053	0.117	0.063	0.105	0.133	0.034
Current Pregnancy	0.019	0.116	0.259	0.138	0.232	0.294	0.076
Baby Past Year	0.007	0.044	0.098	0.052	0.088	0.111	0.029
Ever Detox	0.020	0.120	0.266	0.142	0.239	0.302	0.078
Ever SSC	0.010	0.059	0.132	0.070	0.118	0.150	0.039
Ever Doubled	0.011	0.067	0.150	0.080	0.135	0.170	0.044
Two Moves	0.006	0.038	0.084	0.045	0.076	0.096	0.025
Prev. Primary Tenant	0.018	0.111	0.248	0.132	0.222	0.281	0.073
Stay with Parents	0.004	0.021	0.047	0.025	0.042	0.054	0.014
Stay with Others	0.015	0.090	0.200	0.107	0.179	0.227	0.058
Hispanic	–0.007	–0.040	–0.090	–0.048	–0.081	–0.102	–0.026
White/Other	–0.009	–0.057	–0.126	–0.067	–0.113	–0.143	–0.037

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Note: Coefficients reported represent the incremental effects on the probability of homelessness associated with each factor as evaluated at the mean subgroup characteristics of all other variables. For a logit model, the coefficients are computed using the following formula:

Coefficient = B * P(Z) * (1 - P(Z)), where
P(Z) = e /(1 + e) and Z = X * B and
B is the vector of logit coefficients and X is the vector of mean valued characteristics.

experience raises the risk of homelessness by just 2.0 percentage points.

The logit estimation approach results in a series of estimates of incremental effects that vary across types of families. By contrast, the OLS approach reports average impacts of each factor across the entire sample.

From a forecasting point of view, the key question is whether the assumptions implied by the logit specification result in better targeting potential than the assumptions implied by ordinary least squares. We found very little difference in the targeting potential of the two estimation procedures. For example, with the OLS approach we reported that by targeting 7.2 percent of the total public assistance population it is possible to identify 57.8 percent of all homeless families. With the logit approach, targeting 6.5 percent of the public assistance population accounts for 58.7 percent of the homeless families.

The logit approach is more efficient at targeting, but only marginally so. Importantly, the two approaches target virtually the same families and identify virtually the same subsets of the homeless. For example, 83 percent of the homeless families targeted using the logit approach also are targeted with the OLS approach. Thus, it seems that the two estimation procedures result in forecasts that are very similar. If implementation concerns are ignored, the logit approach is slightly preferable. However, the decision about which model to use in an early warning system should be based on ease of implementation. This issue will be addressed in the report on the early warning system.

V. CONCLUSIONS

The findings presented here refine the portrait of homeless families that we presented in our earlier descriptive report. The data from the NYU-Harris survey of homeless families conducted during the first half of 1988 indicate that homeless families have a large number of social problems that seem to work as a group to lead to a need to use the city shelter system. The analysis reported here begins to pinpoint exactly what risk factors, social problems, and family characteristics put a public assistance family at high risk of needing to use the public shelter system.

Being doubled up with others emerges as perhaps the strongest predictive variable. We have measured this factor in a number of ways, and even when the various dimensions of being doubled up are considered simultaneously, they each predict shelter use (e.g., both being doubled up in the past and being doubled up in the current year independently affect shelter use).

Other key housing characteristics that predict homelessness are frequent moves, prior shelter use, and being late with rent payments. Although these factors are somewhat correlated, the multivariate model indicates that they each have independent and cumulative effects on risk of shelter use.

In addition to housing factors, key risk factors predicting shelter use in a multivariate context are:

* prior use of detox programs,
* prior use of SSC caseworkers,

* three or more socially disruptive experiences (e.g., being sexually abused as a child or physically abused by a boyfriend), and

* current pregnancy.

In addition to identifying key predictors of homelessness for public assistance families, the analysis presented in this report demonstrates how these predictor factors can be used to develop a small target group of families that will include 50 percent of all families on the pathways to homelessness. The forecasting model developed here can target just 5 percent of the public assistance population in identifying 50 percent of high risk families. Or, a smaller target group that includes just 3 percent of the public assistance population can be identified, and 42 percent of high risk families will be identified.

This report demonstrates that an effective targeting strategy is technically feasible. What remains to be considered is what public initiatives might be adopted to actually reduce the need for shelter use among the targeted group of high risk families. The implications of the forecasting analysis for policy considerations is the focus of the fourth volume of this Final Report.

APPENDIX A

OVERVIEW OF DATA COLLECTION METHODOLOGY

(Excerpted from: "A Study of Homeless Families in New York City: Characteristics and Comparisons With Other Public Assistance Families," New York University, Urban Research Center, October 1988, Page 8 - 13).

The main purpose of this study is to assess differences between families on public assistance who eventually require emergency housing and those who do not. In order to meet this objective, a 25-minute interview, assessing such risk factors as housing conditions, social history, family contacts and demographic characteristics was administered to 704 families on Public Assistance (PA) requesting shelter and 524 families on PA not currently in need of emergency housing.

Families requesting shelter were interviewed at the Emergency Assistance units (EAUs) in Brooklyn, Manhattan, and the Bronx. The survey of public assistance families not in need of shelter took place at Income Maintenance Centers (IMC) during quarterly face-to-face recertifications.

The EAU Sample

Data were collected from families on public assistance who requested shelter through the Emergency Assistance Units (EAUs), for the purpose of identifying key differences between EAU and IMC groups. The city's four Emergency Assistance Units are open between 4 p.m. and 4 a.m., seven days a week. Anyone seeking shelter or emergency assistance other than medical care is directed to one of these units. A 10 day pilot study revealed that only a small number of people requested shelter through the Queens EAU and, therefore, it was eliminated from the study. It was also discovered during the early stages of the fieldwork that almost all persons requesting shelter did so between 5 p.m. and 11 p.m., Monday through Friday; interviews were limited to these hours between February 19 and July 15, 1988.

Interviewers screened respondents while they waited to go through the intake procedures at the EAUs. Interviewers approached respondents, told them about the study, and screened them to determine whether or not the family was eligible for participation. Only those individuals who 1) were currently on public assistance or had been on public assistance during the last six months, 2) had not been in a shelter for at least 31 days and 3) had children (or were pregnant) at the time of their request for shelter were deemed eligible for inclusion in the sample. This ensured that the sample was comprised solely of welfare families for whom this was a new episode of shelter entry. All those who agreed to participate were asked to sign a written consent form which guaranteed the confidentiality of the interview.

All told, 6,526 individuals were screened at the EAUs and 972 (15%) met the eligibility requirements. A great many of those screened had been in the shelters at some time during the last month. Of these, 704 (72%) were interviewed. The disposition of individuals approached in the EAUs is shown on the next page.

FINAL EAU SAMPLE DISPOSITION

Number of Individuals Screened	6,526
Number Meeting Criteria	972
Completes	704
Refusals	268
Total	8,470

RESPONSE RATE: 72%

The IMC Sample

A total of 448 families on public assistance were selected and interviewed at the income maintenance centers (IMCs) during the first three weeks of March and April, 1988. Families selected for inclusion in the study were identified in three stages. First, twelve of the 40 IMCs were randomly selected for inclusion in the study with sampling probability proportionate to size. In order to insure as unbiased a sample as possible, two days of each week (excluding weekends) were randomly selected for interviewing at each IMC. Interviewing took place between 9 a.m. and 3 p.m.

A quota of approximately 35 interviews per IMC was established. Since "high risk" cases are seen in the first week of the three week eligibility period each month, quotas for each week of the data collection period were established to insure an equal distribution of cases during the entire recertification

period. A list of sampled IMCs can be found in Appendix A of this document.

At each site, twelve eligibility specialists in the undercare section were randomly selected. A list of sampled workers was provided to the interviewers. Interviewers selected specific cases by approaching the first of the twelve selected eligibility specialists and determining whether or not that particular worker had a scheduled eligibility appointment during the first hour of interviewing (9-10 AM). If the first specialist on the list had no appointments during that hour, interviewers were instructed to go to eligibility specialist number two and determine whether or not this person had an appointment for that hour, and so forth, until an eligible respondent was located for hour number one. When the first interview had been completed, interviewers were instructed to select the next eligibility specialist on their list, following the one who had just provided an eligible respondent.

Respondents were referred to the interviewers by their eligibility specialists. The interviewers explained the nature of the study to potential respondents and requested their participation. Individuals who agreed to participate were asked to sign New York University's human subjects' written consent form before being were interviewed.

In addition to using this method to interview those heads of families who arrived for their scheduled appointments, interviewers were required to enumerate those families who did not show up for their recertification appointment. Overall, approximately 10% of the appointments among sampled eligibility specialists were "no shows". A quota of approximately 40 interviews with families who did not show up for their appointments -- proportional to the overall number of "no-shows" -- was established in order to develop as representative a sample as possible. Respondents in these families were interviewed during a rescheduled visit or by telephone.

A total of 745 families scheduled for their recertification appointments were selected for the study, using the hourly rotation method described above. A total of 524 selected families agreed to participate in the study, for an overall response rate of 70 percent. These figures include a total of 36 families who did not show up for their original appointment and who were interviewed during their re-scheduled appointment at the IMC (28 cases) or by phone (8 cases).

The 524 public assistance respondents include an oversample of 76 Black respondents who were surveyed using the procedures described above at the Brownsville and Bushwick IMC's to insure stability of ethnic comparisons. Such oversampling was

necessitated by the fact that the original sample did not include a sufficient number of blacks to permit subgroup analyses.[1]

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[1] Questions have been raised about the "true" ethnic distribution of the AFDC population in New York City. The sampling technique described above yielded the following distribution: 48% Puerto Rican, 22% other Hispanic, 20% black, and 3% other. This is substantially different from other estimates of this population. For example, according to data from the 1987 Housing and Vacancy Survey, 38% of the public assistance households (families and singles) are black, 36% Puerto Rican, 17% white, and 9% "other." However, there are questions raised by these estimates; for example, how would these estimates change if a category for non-Puerto Rican Hispanics was included, as it was in this study? Estimates for the New York City population, as a whole, are that there are as many non-Puerto Rican Hispanics as there are Puerto Rican Hispanics. In this case, the ethnic breakdown of the AFDC population, obtained by the IMC sampling technique, would seem accurate. In any case, different weighting formulas were applied to the data set, to adjust for possible biases in the ethnic composition. Weighting had little effect on the analyses and the decision was made to present unweighted analyses only.

APPENDIX B: GLOSSARY

PREVIOUS PRIMARY TENANT:
Respondent was a primary tenant for at least a one year period, but not at the place stayed at longest during the past year. For each of the "family type" variables, the reference group includes families who were primary tenants at the place stayed at longest last year.

STAYED WITH PARENTS:
Respondent has never been a primary tenant and stayed with parents for the longest time during the last year.

STAYED WITH OTHERS:
Respondent has never been a primary tenant and has not lived with their parents for the longest time during the past year.

TWO MOVES:
Respondent has moved at least twice during the past year.

EVER EVICTED:
Since having children or becoming pregnant, respondent has been evicted.

EVER DOUBLED:
Since having children or becoming pregnant, respondent has lived together with another person or family.

PRIOR SHELTER:
Respondent has previously been in a shelter or welfare hotel.

EVER DETOX:
At some time, respondent has been enrolled as a patient in a detox or treatment center for drug or alcohol abuse.

EVER SSC:
At some time, respondent has had a caseworker from Special Services for Children (SSC) or the Bureau of Child Welfare (BCW).

DISRUPTIONS:
Respondent experienced at least three of the following nine disruptive experiences:

Before turning 18 years old:
- lived in a foster home
- lived in an institution or group home

- ran away from home, a group home, or institution for a week or more
- lived on the street, a public place, an abandoned building, the subway, or a similar place
- been physically abused
- been sexually abused

As an adult:
- been physically abused or threatened with violence by a person the respondent was involved with.

Within the past year:
- stopped living with a boyfriend
- told to leave by parents.

CURRENT PREGNANCY:
Respondent was pregnant at time of interview.

BABY PAST YEAR:
Respondent gave birth within the past year.

FREQ CLOSE:
Family has experienced two or more administrative closings during the life of the case.

BONUS ADM:
Family is receiving a bonus payment as a result of child support payments.

RECOUPAD:
Family is having funds recouped by the agency, typically as the result of an earlier emergency payment.

FOSTER:
Head of family had been in foster care before turning age 18.

INSTITUTION:
Head of family had been in an institution or group home before turning age 18.

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FORECASTING MODELS TO TARGET FAMILIES AT HIGH RISK OF HOMELESSNESS
(FINAL REPORT: VOLUME 3)

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NOTE ON STRUCTURE OF THE REPORT

This report is one volume of the Final Report for the New York University Study of Homeless Families that has been conducted for the New York City Human Resources Administration. The Final Report is comprised of four distinct volumes:

Volume 1: A STUDY OF HOMELESS FAMILIES IN NEW YORK CITY: RISK ASSESSMENT MODELS AND STRATEGIES FOR PREVENTION.

Volume 2: A STUDY OF HOMELESS FAMILIES IN NEW YORK CITY: CHARACTERISTRICS AND COMPARISONS WITH OTHER PUBLIC ASSISTANCE FAMILIES.

Volume 3: FORECASTING MODELS TO TARGET FAMILIES AT HIGH RISK OF HOMELESSNESS.

Volume 4: IMPLICATIONS OF THE NYU STUDY OF HOMELESS FAMILIES FOR PUBLIC POLICY.

TABLE OF CONTENTS

I. Introduction 1

II. Methodology 5
  Data Set 5
  Weighting 6
  Model Specification 9
  Estimate Approach 10

III. Findings 13
  Weighted Cross Tabulations 13
  Multivariate Analysis 18
  Using the Forecasting Model to Target High Risk Families 23
  Practical Considerations Designing a Forecasting Model 25

IV. Logit Analysis 28

V. Conclusions 33

  Appendix A: Overview of Data Collection Methodology 35
  Appendix B: Glossary 41

I. INTRODUCTION

Why do families become homeless in New York City and become reliant on the City's emergency housing system? Why do other families which have low incomes and are on public assistance manage to remain in apartments? Is there any way to identify in advance which families are going to require City shelters in the near future, and then to design interventions to head off these episodes of homelessness?

This report addresses questions like these as part of a comprehensive analysis of factors that are related to families' use of public shelters in New York City. On any given night, between 4,000 and 5,000 New York City families stay in City shelters; during a given year, it is estimated that between 7,000 and 10,000 different families that are on public assistance use the emergency housing system for some period of time.

The most important underlying cause of this large incidence of homelessness among families is the acute shortage of low-income housing in the City. The City has recently begun to rehabilitate low income housing at a faster rate, but the prospects of expanding housing so that shelters are no longer necessary are dim at least in the short run. Because of this, it is important for the City to think about what other initiatives might reduce the numbers of families that must rely on emergency housing.

An important first step in developing policies that might prevent the need for shelter use is to better understand the dynamics that lead to homelessness among New York City families. An understanding of the correlates of homelessness may provide insight into what types of initiatives would be effective in reducing the need for emergency housing.

Another important reason for understanding the correlates of homelessness is that an ability to forecast which families are at high risk of becoming homeless will permit effective targeting of preventive service initiatives on those families at high risk of needing emergency housing. With over 200,000 families relying on public assistance in New York City, it would be expensive to deliver preventive services to the entire public assistance population. Rather, it is necessary to target preventive services on a smaller subset of families that are at high risk of becoming homeless.

This report focuses on the development of statistical models that can be used to forecast which New York families are at high risk of becoming homeless and requiring emergency housing. The purpose of this exercise in forecasting is to develop a method for identifying in advance families that are likely to be shelter users in the near future. Such a targeting methodology would improve the City's ability to develop cost-effective preventive service programs to alleviate some of the problems that are causing high risk families to need emergency housing.

The Human Resources Administration had developed some forecasting models prior to the start of this project. The agency found that 12 percent of families on public assistance have one or both of the following characteristics: they have moved two or more times since their welfare case opened and they have had their case closed for administrative reasons (e.g., failure to follow procedures) two or more times. If a target group of these families is formed, it turns out that 42 percent of all homeless families would be in that target group. That is, 42 percent of homeless families have one or both of the two forecasting factors considered.

The question posed for this project is whether additional data analysis and more sophisticated forecasting models could reduce the size of the public assistance target group and, at the same time, either keep the percentage of homeless families the same or actually increase the total number of homeless families successfully targeted. More accurate targeting is important because it is generally not feasible to provide extensive preventive service programs to large numbers of families. To effectively target resources, it is important to form target groups that are comprised predominantly of families that are at high risk of shelter use.

The next section of the report reviews the methods used in the analysis. Following this methods section is a descriptive analysis that compares characteristics of families that use the emergency housing system and families that are on public assistance but do not use the shelter system. The report then turns to a description of the findings related to the forecasting models and a discussion of how the models can be used to target high risk families.

II. METHODOLOGY

Data Set

To develop statistical models to forecast which public assistance families are at high risk of becoming homeless, it is necessary to have a data set that includes a subsample of families that are homeless and a comparison subsample of families that are on public assistance but have managed to remain out of the emergency housing system. For each of the sampled families, it is important to measure characteristics that are expected to correlate with the use of emergency housing.

For this study, we developed such a data set by interviewing 704 families who were homeless and applying for emergency housing and a comparison sample of 524 "housed" public assistance families. A twenty-five minute in-person survey was conducted with each family in the sample; these surveys were done by Louis Harris and Associates at Emergency Assistance Units (EAUs) and Income Maintenance Centers (IMCs) during the first seven months of 1988.

The survey data collected extensive information about each family concerning the following:

* Housing History;
* Pregnancy and Parenting Experiences;
* Health Mental Health and Substance Abuse Problems;
* Welfare, Employment, and Education Patterns; and
* Social Relationships.

In addition, we added information from the administrative records of HRA to the data set in order to include some measures concerning the impacts of the public assistance system on risk of homelessness. These administrative factors included frequencies of case closings, the length of time on public assistance, recoupment policies, and frequencies of bonus payments when spouses make support payments. Because administrative records could not be matched for 131 families, when doing analysis that includes the administrative variables, sample sizes are 1,097 rather than 1,228.

Each family in the sample was either on public assistance or had been on public assistance within six months of the interview. The study is restricted to public assistance families--even though between 10 percent and 15 percent of those requesting shelter at EAUs are not on public assistance--because it is the public assistance population which is known to HRA and which can be targeted in advance for special preventive services. Thus, this is the population for whom preventive service programs are a possibility.

The survey methods used to collect the data are described in volume two of this Final Report. Rather than repeat the data collection strategy here, the relevant pages from the companion report are included as Appendix A of this report.

WEIGHTING

The key statistical issue that had to be addressed to use our survey data to formulate a forecasting model is that our sample is a "choice based" sample. That is, we selected our sample based on whether a family was seeking emergency housing (this is one value of our model's "dependent" variable) or whether a family was not seeking emergency housing (this is the other value of our "dependent" variable).

Given this sampling strategy, we clearly could not compute probabilities of homelessness for the population of public assistance families based on the raw data from our sample. Fifty nine percent of our sample was homeless while approximately three percent of the general public assistance population seeks emergency housing during a given year.

Fortunately, oversampling of a subpopulation is a common procedure in studies like ours. This approach often is used to study rare events such as the incidence of cancer or heart disease, and the classic example of the use of choice based samples is the study of why some people choose buses and others choose trains or automobiles for commuting.

To properly adjust the data for use in a forecasting model, it is necessary to weight the data for each family to reflect the actual probability that the family would have been sampled had a simple random sample been chosen. To develop these weights, it is necessary to have some approximations of the actual incidence of homelessness in the population under study.

To develop our weights, we made the following assumptions: 1) At any point in time, there are approximately 5,000 homeless families served by the City's emergency housing system. Over the course of a year, we assume that 10,000 distinct families spend some amount of time in emergency housing.

2) There are approximately 250,000 public assistance families at any point in time, and approximately 290,000 families in New York City spend some time on public assistance in a twelve month period. Thus, the 10,000 emergency shelter users represent 3.33 percent of the general public assistance population.

A similar estimate of the risk of shelter use for the general assistance population can be obtained from our comparison sample. Among the 524 public assistance families in our sample, three percent had spent some time in a public shelter during the twelve months prior to the interview. The fact that two independent approaches to estimating the population weights lead to almost identical estimates increases our confidence in the accuracy of the weights.

Given these assumptions (our weights can easily be changed if other assumptions are more appropriate; small changes in the weights will have small effects on parameter estimates but should not affect the overall pattern of our findings), each of our EAU sample families are weighted by a factor of .058. This weight reflects the ratio of expected homeless families in a random sample (.033*1228) to the actual number of homeless families sampled (704): .058 = (.033*1228)/704. In the case of the public assistance comparison sample, the weight is 2.265 which is the ratio of expected "housed" families in a random sample

(.967*1228) to the actual number of "housed" families sampled (524): 2.265 = (.967*1228)/524.

In the analysis presented in this report, all findings are weighted by these factors. The result of the weighting factor is 1) to maintain the original degrees of freedom in our data set (1228), 2) to take advantage of the enhanced statistical power that results from greatly oversampling homeless families, and (3) to estimate a model that reflects the actual risks of homelessness among subgroups of the public assistance population.

MODEL SPECIFICATION

Our data set includes a large array of variables that are potential correlates of homelessness. Each of these variables was included in the survey based on a priori hypotheses about the causes of shelter use. It would be very cumbersome to include each and every possible predictor of homelessness in the model at one time. To explore the various hypotheses that are generated from our earlier reports, we adopted the following systematic approach to hypothesis testing:

1) Based on a review of our earlier descriptive analysis, we identified eighteen variables that we expected to be the most important predictors of homelessness. We estimated the model with all of these variables included as independent variables and with the dependent variable measured as a "one" for the EAU sample of shelter requesters and measured as a "zero" for the comparison sample of "housed" public assistance families. (This equation is referred to as BASIC 1).

2) We eliminated insignificant independent variables from BASIC 1 except in the case of age and ethnicity, which we considered essential adjustment variables. The resulting equation is referred to as BASIC 2.

3) We added one additional independent variable at a time to BASIC 2 to explore which of the other seventeen potential

correlates of homelessness might be significant. All additional independent variables that were statistically significant (at the 90% level) were added to the equation to form BASIC 3. We then went back and again looked at each of original twenty variables (from BASIC 1) that were eliminated from BASIC ~~1 to~~ see if any of these are significant when added to BASIC 3.

The findings presented in the report are for the final equation (BASIC 3); this model is often referred to in our reports as the "complete" model. In the text, we also sometimes refer to additional equations that added independent variables to BASIC 3 one at a time. It should be noted, however, that the estimated parameters are relatively stable across different specifications of the model. In addition, the final form of the model closely resembles our initial "best guess" at key variables. Twelve of the fifteen variables that appear in BASIC 3 were included in BASIC 1.

ESTIMATION APPROACH

In this report, we focus principally on weighted ordinary least squares estimation approaches for the statistical models. Even with choice based samples and dichotomous dependent variables, ordinary least squares results in "consistent" parameter estimates for the regression coefficients. The least squares procedure is usually not the preferred estimation method for dichotomous dependent variables partly because the variances of the regression coefficients are generally larger than occurs with other estimation approaches (i.e., we lose some statistical power by using least squares). In addition, the linear model implied by least squares can result in forecasts of probabilities of homelessness greater than one or less than zero.

Because of these potential problems, we also have estimated the forecasting model using weighted logistic regression analysis. This non-linear forecasting model has the important feature that the estimated impacts of any given variable on the risk of homelessness vary depending on the baseline estimate of risk. Marginal impacts of specific factors are smaller for families at very low risk of homelessness and at very high risk of homelessness.

We generally report the least squares findings in this report in part because they are the clearest multivariate analysis that is possible. The resulting coefficients are easy to interpret and to understand, and give a good overall indication of what variables are the best predictors of homelessness in a multivariate context. In addition, as explained later in the findings sections, we did not find any substantial differences in the accuracy of the two models in terms of identifying high risk target groups. Thus, from a practical perspective, it does not make much difference which of the two models are used for targeting.

The next section of the report outlines our findings. We start with a presentation of the simple weighted cross tabulations that indicate the relative risk of homelessness for discrete subgroups of the public assistance population. After presenting cross tabulation results, we present an overview of the findings for the multivariate model of predictors of homelessness. Following this overview, we explore the findings in some more detail for each type of predictor variable: 1) housing, 2) parenting, 3) health, mental health, and substance abuse, 4) work, education, and welfare history, and 5) social supports and disruptive experiences, and 6) administrative records. The final sections of the report explain how the statistical model can be used for forecasting and for identifying high risk target groups among the public assistance population.

One important caveat concerning our analysis is that the sample of homeless families is comprised of individuals who present themselves at the EAUs and request shelter. A small number of families seeking shelter at the EAUs either do not wait the two or more hours it takes to obtain an assignment or never show up at the assigned shelter for one reason or another (sometimes because they do not like the place assigned). In a strict sense, therefore, our analysis compares shelter requesters to the comparison sample of housed families rather than shelter users and a comparison sample.

A related caveat is that our analysis treats the two samples (EAU and IMC) as if they were "stocks" that do not "flow" from status to status. In fact, over time families flow from one sample (housed public assistance families) to the other sample (shelter requesters) and back again. The analysis we present focuses on the question: if you consider a population of public assistance families at a given point in time, which ones are likely to request shelter in the next twelve months?

III. FINDINGS

Weighted Cross Tabulations

As a transition from the descriptive findings presented in volume 2 of the Final Report to the analytical findings that are presented here, this section presents unadjusted cross tabulations for each forecasting variable under consideration for the EAU (homeless) sample and the Income Maintenance Center (IMC) sample of comparison families. Table 1 presents the cross tabulations for the unweighted data and then for the weighted data. The weighted data are presented in the form of probabilities of shelter use for subgroups of families defined by each forecasting characteristic. The unweighted data represent the sample distributions for each variable and are identical to the findings presented in the earlier report.

The unweighted and weighted data are intrinsically interrelated. Whenever the sampling distributions of the unweighted data are substantially different for the two samples, the probability of shelter use differs substantially depending on which subgroup a family is in. The differences in probability of shelter use are largest when a very small percentage of the comparison sample is in the high risk group while a larger percentage of the EAU sample is in the risk group. Such factors, of course, will be the best predictors of homelessness because they will have the important characteristic of minimizing Type II error (i.e., false positives).

Table 1
Descriptive Statistics for Potential Predictors of Homelessness

	SAMPLE DISTRIBUTION		PROBABILITY OF SHELTER USE
	EAU	IMC	
HOUSING:			
PRIMARY TENANTS AT PLACE STAYED LONGEST LAST YEAR	36.5%	85.5%**	15.0%**
ONCE WERE PRIMARY TENANTS BUT NOT AT PLACE STAYED LONGEST LAST YEAR	19.0%	2.7%	19.7%
NEVER HAVE BEEN PRIMARY TENANTS:			
STAYED WITH PARENTS FOR LONGEST PERIOD LAST YEAR	14.3%	6.1%	7.5%
STAYED WITH OTHERS FOR LONGEST PERIOD LAST YEAR	30.2%	5.7%	15.4%
MORE THAN 3 PERSONS PER BEDROOM LAST YEAR	83.5%	74.4%**	3.7%
NOT LIVED IN CROWDED SITUATION	16.5%	25.6%	2.2%
REGULATED HOUSING: HPD, PROJECTS, SECTION 8	7.5%	27.9%**	9.0%*
NON-REGULATED HOUSING	92.5%	72.1%	4.2%
LIVED IN A RENT CONTROLLED APARTMENT	21.4%	47.9%**	1.5%**
DID NOT LIVE IN RENT CONTROLLED APARTMENT	78.6%	52.1%	4.9%
MOVED AT LEAST TWICE WITHIN PAST YEAR	31.4%	5.0%**	17.9%**
MOVED ONE TIME OR LESS IN PAST YEAR	68.6%	95.0%	2.4%
HAVE BEEN DOUBLED-UP LIVING WITH OTHERS AT SOME TIME SINCE HAVING CHILDREN	81.1%	38.2%**	6.8%**
HAVE NEVER BEEN DOUBLED-UP	18.9%	61.8%	1.0%
EVER EVICTED	23.3%	7.1%**	10.2%**
NEVER EVICTED	76.7%	92.9%	2.8%
EVER LATE IN RENT PAYMENTS FOR 2+ MONTHS	22.9%	21.6%**	3.5%
NEVER LATE IN RENT PAYMENTS	64.5%	71.7%	2.4%
NEVER HAVE PAID RENT	12.6%	6.7%	6.1%
EVER TWO OR MORE POOR BUILDING CONDITIONS	46.6%	37.8%**	4.1%
ONE OR LESS POOR BUILDING CONDITIONS	53.4%	62.2%	2.9%
PREVIOUS SHELTER USE	31.5%	7.6%**	12.4%**
NO PRIOR SHELTER	68.5%	92.4%	2.5%
PARENTING:			
PREGNANT	34.5%	5.5%**	17.7%**
NOT PREGNANT	65.5%	94.5%	2.3%
HAD A BABY WITHIN PAST YEAR	26.0%	10.7%**	7.7%**
NO NEW CHILD	74.0%	89.3%	2.8%
HAD A CHILD BEFORE AGE 18	36.8%	23.7%**	5.0%*
DID NOT HAVE CHILDREN BEFORE AGE 18	63.2%	76.3%	2.8%
HEALTH, MENTAL HEALTH AND SUBSTANCE ABUSE:			
HEALTH PROBLEM LAST YEAR	17.5%	23.1%**	2.5%
NO HEALTH PROBLEM	82.5%	76.9%	3.6%
TOOK YOUNGEST FOR A WELL CHILD EXAM IN PAST YEAR	78.6%	72.5%**	3.6%
NO WELL CHILD EXAM	21.4%	27.5%	2.6%
NERVOUS PROBLEM LAST YEAR	10.4%	16.0%**	2.2%
NO NERVOUS PROBLEM	89.6%	84.0%	3.5%
OVERNIGHT ADMISSION TO MENTAL HOSPITAL	4.1%	1.0%**	12.9%*
NEVER ADMITTED TO MENTAL HOSPITAL	95.9%	99.0%	3.2%
REPORTED PROBLEM WITH SUBSTANCE ABUSE IN PAST 6 MONTHS	4.8%	1.1%**	12.7%**
DID NOT REPORT A PROBLEM	95.2%	98.9%	3.2%
EVER PATIENT IN DETOX CENTER FOR DRUG OR ALCOHOL ABUSE	8.2%	1.9%**	12.9%**
NEVER DETOX PATIENT	91.8%	98.1%	3.1%

Table 1 (con't.)

Descriptive Statistics for Potential Predictors of Homelessness

	SAMPLE DISTRIBUTION		PROBABILITY OF SHELTER USE
	EAU	IMC	
EDUCATION, WORK AND WELFARE:			
COMPLETED 12 OR MORE YEARS OF EDUCATION	39.6%	36.8%	3.6%
COMPLETED FEWER THAN 12 YEARS	60.4%	63.2%	3.2%
WORKED FULL-TIME FOR ONE YEAR OR MORE	33.4%	40.1%**	2.8%
NO FULL-TIME WORK	66.6%	59.9%	3.7%
PARENTS WERE ON PUBLIC ASSISTANCE	51.8%	31.1%**	5.4%**
PARENTS WERE NOT ON PUBLIC ASSISTANCE	48.2%	68.9%	2.3%
EVER HAD A SSC CASEWORKER	8.9%	1.7%**	15.2%**
NEVER HAD A SSC CASEWORKER	91.1%	98.3%	3.1%
CURRENTLY ENROLLED IN WIC - NEW BABY OR PREGNANT	24.3%	9.5%**	8.1%**
NOT ENROLLED - NEW BABY OR PREGNANT	30.4%	6.3%	14.2%
NO NEW BABY OR NOT PREGNANT	45.3%	84.2%	1.8%
SOCIAL SUPPORTS:			
THREE OR MORE DISRUPTIVE SOCIAL EXPERIENCES	18.5%	3.4%**	15.6%**
LESS THAN THREE DISRUPTIVE EXPERIENCES	81.5%	96.6%	2.8%
PARENTS TOLD YOU TO LEAVE WITHIN PAST YEAR	15.1%	1.1%**	31.1%**
NOT TOLD TO LEAVE	84.9%	98.9%	2.9%
DEMOGRAPHICS:			
30 YEARS OF AGE AND YOUNGER	72.0%	38.5%**	6.0%**
OVER 30 YEARS OF AGE	28.0%	61.5%	1.5%
BLACK	54.0%	31.9%**	5.5%**
HISPANIC	39.5%	59.5%	2.2%
OTHER RACE	6.5%	8.6%	2.6%
ADMINISTRATIVE VARIABLES:			
TWO OR MORE ADMINISTRATIVE CLOSINGS	56.2%	28.2%**	6.2%**
NONE OR ONE CLOSING	43.8%	71.8%	2.0%
FAMILY CURRENTLY HAS ASSISTANCE CHECK REDUCED TO REPAY HRA FOR ADVANCED PAYMENTS	2.8%	2.5%	3.5%
FAMILY NOT CURRENTLY BEING RECOUPED	91.2%	97.5%	3.2%
FAMILY RECEIVES BONUS PAYMENT FOR SUPPORT PAYMENTS	2.4%	12.3%**	0.6%**
NO BONUS PAYMENT DUE	97.6%	87.7%	3.5%
HOUSEHOLD HEAD UNDER 30:			
FAMILY ON WELFARE FOR FIVE OR MORE YEARS	37.7%	44.4%**	5.0%
FAMILY ON WELFARE FOR UNDER FIVE YEARS	62.3%	55.6%	6.5%
HOUSEHOLD HEAD OVER 30:			
FAMILY ON WELFARE FOR FIVE OR MORE YEARS	25.4%	36.4%**	1.2%
FAMILY ON WELFARE FOR UNDER FIVE YEARS	74.6%	63.4%	2.0%

* p<.1 for chi square test of significance for differences in percentages across samples.
** p<.05 for chi square test of significance for differences in percentages across samples.

Sample sizes: EAU: 704, IMC: 524. For administrative variables, data could not be obtained for 131 families; sample sizes are: EAU: 618, IMC: 479.

Source: Health Research Program tabulations from HRA administrative records and the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

In reviewing the probabilities of shelter use reported in Table 1, it is important to remember that the probabilities do not adjust for other potential causes of homelessness. Thus, it is possible that some factors that appear to differentiate the sample in terms of risk of homelessness are really proxies for other factors. This possibility is explored in the multivariate analyses reported later in this report.

The housing variables include some of the most important predictors of homelessness. Having experienced multiple moves in the past year, having ever been doubled up with others, having ever been evicted, having used city shelters previously, and not living at one's own place last year are all strong predictors of shelter use for our sample. For example, 17.9 percent of families who moved two or more times during the past year seek emergency housing compared to just 2.4 percent of other families. Families who have ever been evicted have a 10.2 percent chance of seeking shelter, previous shelter users have a 12.4 percent risk, and individuals who once were primary tenants but lived with others last year have a 19.7 percent risk.

In the companion report, we found that former primary tenants who had to double up last year and families which had never had their own place to live seemed to be at highest risk of needing emergency housing. This earlier finding is clearly confirmed in the weighted analysis reported in Table 1. In addition, in this report, we divide families who have never had their own place to live into two subgroups: those who lived with their parents last year and those who lived with others. Families who lived with others are at much higher risk (19.7 percent) of seeking emergency housing than families who lived with their parents (7.5 percent risk).

In the simple weighted cross tab analysis, we found two other housing variables which categorize families into groups that have significantly different risks of seeking emergency housing. These concern the type of housing in which the family lived. Those who lived in Section 8 or HPD housing or the projects were at lower risk, as were those who lived in rent controlled apartments. Three other housing factors turned out not to differentiate risk of homelessness. These were: crowding in the place stayed longest last year; having ever lived in buildings with two or more serious building problems (e.g., rats); and having fallen behind in rent payments.

All three of the parenting variables we considered distinguish subgroups with different risks of homelessness. Most dramatic is the finding that pregnant women have a 17.7 percent chance of seeking shelter compared to just a 2.3 percent chance for families headed by non-pregnant women. This finding is quite striking in its implication that 17.7 percent of all public assistance families which have a pregnant mother as its head seek shelter during the course of the pregnancy. As emphasized in the companion report, it is not possible with our data to determine whether HRA policies (which at the time of our survey gave preferential treatment to pregnant women in terms of placements) cause this pattern or whether the circumstances of pregnant women actually lead to such increased risk of homelessness.

Women who had a baby within the past year also are at increased risk of seeking emergency housing but the 7.7 percent rate among this subgroup is much smaller than the 17.7 percent chance of using emergency housing found for the pregnant mother subgroup. The other parenting variable is having a child while still a teenager. This subgroup has a 5.0 percent risk of shelter use compared to a 2.8 percent risk for mothers who were not teen parents. This difference is significant at the six percent confidence level.

Most of the variables that measure health status did not significantly distinguish sample subgroups in terms of risk of homelessness. However, variables concerning issues of mental health and substance abuse proved to be more relevant. Having spent at least one night in a mental hospital leads to a 12.9 percent risk of homelessness. Reporting prior enrollment in a detox program for drug or alcohol abuse leads to an 11.1 percent risk of homelessness, while reporting a recent problem with substance abuse leads to a risk of 12.7 percent.

Previous work experience does not affect risk of homelessness, but having had parents who also were on public assistance almost doubles a family's risk of becoming homeless (5.4 percent vs 2.3 percent). In addition, having been assigned a SSC worker leads to a high risk of seeking emergency housing

(15.2 percent). Lower educational attainment is not associated with increased risk.

Social experience factors are also considered in our analysis. These variables include nine factors that assess different disruptive experiences that an individual could have experienced as a child or as an adult. After assessing the intercorrelations, we developed a simple index that counts the number of these experiences. The forecasting variable we specify distinguishes individuals who have three or more of these experiences from those who have had two or fewer. As reported in Table 1, having had more than two of these experiences greatly increases a family's risk of homelessness from 2.8 percent to 15.6 percent. Also, families who were told to leave by their parents (i.e., by the respondent's parents) were at dramatically increased risk. However, these results may be misleading since for many families being asked to leave is the proximate event to requesting shelter.

Variables taken from HRA's administrative records were also analyzed. Only bonus payments and frequent administrative closings effectively distinguish the housed and homeless samples. As indicated in Table 1, families with two or more administrative closings have a 6.2 percent probability of shelter use, as compared with 2.0 percent of those who had only one or none. Families receiving bonus payments (because of child support payments) have their risk of shelter use decreased from 3.5 percent to .6 percent. Neither length of time on public assistance or currently having funds recouped by the agency are associated with increased risk of homelessness.

Multivariate Analysis

The multivariate analysis uses multiple regression statistical techniques to assess the independent effects of each potential forecasting variable on the likelihood of seeking shelter. In measuring the effects of any given variable, the impacts of other possible forecasting variables are held constant. Thus, in a multivariate context, we can be relatively confident that significant variables are significant because of the factor measured and that variables are not just proxying other factors.

As explained in the methods section, the initial model we present includes variables that were found to be significant on earlier iterations of our analyses. This model includes fifteen distinct factors, which are defined in the Glossary (Appendix B). The other twenty factors that we considered do not have a significant impact on risk of homelessness. In addition, the coefficients and significance for each variable included in the initial or basic model change minutely when each of the other twenty insignificant variables are added to the model.

Table 2 presents our findings for the complete model and for a set of models that use fewer variables than the complete model. The findings for each set of variables are discussed in the following paragraphs.

TABLE 2
Predictors of Homelessness: Weighted Least Squares Model for Full Sample

Variables	Complete Model	Admin Data Model	Survey Data Model	"Easy" Data Model
Previous Primary Tenant	0.10 *	----	0.11 *	----
Stayed with Parents	0.02	----	0.01	----
Stayed with Others	0.08 *	----	0.07 *	----
Two Moves	0.06 *	0.12 *	0.06 *	----
Ever Evicted	0.04 ***	----	0.04	----
Ever Doubled	0.02	----	0.02	----
Prior Shelter	0.04 **	0.07 *	0.04 **	0.08 **
Ever Detox	0.08 **	----	0.09 **	0.09 *
Ever SSC	0.02	0.04 **	0.05	0.03 *
Disruptions	0.09 *	----	0.09 *	----
Current Pregnancy	0.10 *	----	0.11 *	0.12 *
Baby Past Year	0.03	----	0.03	0.04 **
Age (linear)	-0.0004	----	-0.004	-0.001 **
Hispanic	-0.01	----	-0.02	----
White/other	-0.02	----	-0.02	----
Freq Close	0.01	0.03 *	----	----
Bonus Adm	-0.01	-0.02	----	-0.02
Recoupad	0.01	0.003	----	-0.004
Foster	----	----	----	0.04
Institution	----	----	----	0.05
Constant	0.01 **	0.01 **	0.01	0.05 **
R	0.14	0.07	0.14	0.09

* p < .01
** p < .05
*** P < .10

Note: All variable except for age are dichotomous. The numbers presented in this table are regression coefficients that measure the change in risk of homelessness for families having the characteristic compared to those who do not. The dependent variable equals one if a family requested shelter (EAU sample) and equals zero if a family was not a requester (IMC=1).

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

See Glossary for variable definitions.

Demographic Factors. The two demographic factors included in the multivariate model are ethnicity (black, Hispanic, other) and age (in the multivariate model, age is included in its linear form). Both of these variables were found to be highly significant in the bivariate cross tabs. For example, those families with a mother under thirty had a 6.0 percent risk of homelessness compared to a 1.5 percent risk for those with a mother over thirty. Blacks have a 5.5 percent risk compared to a 2.2 percent risk for Hispanics in the unadjusted analysis.

In the multivariate analysis, the impacts of both age and race on homelessness disappear. This suggests, as would be expected, that it is not age or race themselves that put a family at risk of homelessness but characteristics of young families and black families relative to other families that lead to differentials in risk. The fact that age and race become insignificant in the multivariate model suggests that our model in fact is measuring those key factors that distinguish the young from the old and blacks from Hispanics in leading to differential rates of homelessness.

Housing History. Previous primary tenants (i.e., those families which lived with others last year but who once had their own place to live) have a risk of homelessness that is ten percentage points greater than the risk for families that were primary tenants at the place where they lived longest last year (Primary tenants are the reference group for the family type variables in the model). Families which never had their own place to live and lived with family or friends but not parents last year have a eight percentage point greater risk of homelessness than the families that were primary tenants.

Interestingly, those families who have never been primary tenants but who live with their parents are not at elevated risk of homelessness. This is one result that is very different than was found in the unadjusted cross tabs. In the unadjusted analysis reported in Table 1, we found that these families had a six percentage point difference in risk of homelessness compared to families that were primary tenants.

Families which have moved two or more times in the past year have a six percentage point greater risk than families which have moved less than two times, and families which have ever been evicted have a four percentage point elevated risk of becoming homeless. Prior shelter users have a four percentage point elevated risk relative to non-users, and those who have been doubled up at some point in the past have a one percentage point elevated risk.

Each of these differences in risk is smaller than in the unadjusted analysis, but the smaller differentials are caused by the intercorrelations in the data. Those at very high risk of shelter use are those who are characterized by multiple risk factors. For example a family which has been doubled up, has been a previous shelter user, has been evicted, and which has moved on multiple occasions has a fifteen percentage point elevated risk of homelessness compared to a family which has none of these four risk factors. Thus, even though each factor has a relatively small impact on shelter use, the model is likely to be useful for forecasting since many families have multiple risk factors.

Pregnancy and Parenting. The variable measuring current pregnancy remains very significant in the multivariate model and indicates that pregnancy increases risk of shelter use by ten percentage points. The "baby in past year" variable, however, loses its significance. This suggests that although having a new baby increases risk of homelessness, it is intercorrelated with other characteristics that are associated with increased risk.

Health, Mental Health, and Substance Abuse. Previous enrollment in a detox program continues to be a good predictor of shelter use in the multivariate model. Those who have used a detox program are eight percentage points more likely to use the shelter system than others. Having spent at least one night in a mental hospital leads to an eight percentage point higher risk of homelessness. This variable is not included in Table 2 because its significance is very sensitive to what other variables are in the model. When the mental hospital use variable is added to the fifteen variables listed in Table 2, its coefficient is significant at the .10 confidence level. As in the unadjusted analysis, none of the health status or health care utilization variables are significant forecasters of shelter use.

Work, Education, and Welfare History. The various work experience and education level variables analyzed were uniformly insignificant as predictors of shelter use. In addition, having had a parent on welfare does not remain significant in the multivariate analysis. The only factor in this group of variables that is significant is previous experience with SSC. Those who have ever been assigned a SSC caseworker have a seven percentage point elevated risk of becoming homeless.

Social Supports and Disruptive Experiences. The variable that distinguishes families who have had three or more disruptive social experiences from those with fewer than three such experiences is very significant in the multivariate model. Having had three or more disruptive experiences elevates risk of homelessness by nine percentage points. Social support variables, such as having a close relative in New York City, did not significantly impact on a family's risk.

Administrative Variables. Of note, frequent administrative closings and bonus payments, both of which had effectively distinguished homeless and housed families in the bivariate analyses, are no longer significant in the multivariate model. It appears that administrative closings are associated with increased risk of homelessness because such closings are highly correlated with other risk factors, such as frequent moves. In the case of bonus payments, the extremely small number of cases receiving such payments results in its statistical insignificance.

Using the Forecasting Model to Target High Risk Families

Once estimated, the forecasting model can be used to target which families are at highest risk of becoming homeless. This is done by considering the predicting characteristics of each given family and calculating, using the parameters of the model, the forecasted probability or risk of using the shelter system for each family. A target group is formed by choosing some cut-off risk level, and deciding that families with a predicted risk above the cut-off level should be in the target group. Unless a forecasting model is perfectly accurate, any target group will include some families which are predicted to be at high risk but which would never actually use the shelter system. In addition, some future shelter users are likely to be misjudged by the forecast model and not end up in the target group. A key question in evaluating alternative forecasting models is the accuracy of the model in forming as small a target group as possible that includes a large portion of future homeless families. Accuracy can be judged in one of two ways:

* having to target as small a number of public assistance families as possible in order to have some specified percentage of all homeless families included in the target group (e.g., a model that identifies 5% of the public assistance population at high risk would be considered more accurate than a model that identifies 10% of the public assistance population at high risk, if both models in fact include 50% of all homeless families in the group targeted).

* having the highest possible percentage of all homeless families in a target group of a given size (e.g., if two models both target 3% of the public assistance population as high risk families, the model that includes 40% of all homeless families would be considered more accurate than a model that includes just 30% of all homeless families in the target group).

How accurate is the "complete model" discussed above? Table 3 presents the relevant statistics for assessing accuracy (the relevant findings for this discussion are those reported for the "complete" model). Using the first definition, it turns out that 5 percent of all public assistance families need to be targeted in order to have half of the families that will request emergency housing during a twelve month period included in the target group. A related statistic is that of all families in such a target group, 30 percent will be future homeless families (in the absence of some intervention).

Table 3 also demonstrates that when the target group is made smaller (for example, 3 percent of the public assistance family population), the percentage of all homeless families in the target group decreases (to 42 percent). However, the composition of the target group becomes more concentrated with homeless families as the target group becomes smaller. When the target group includes 3 percent of the public assistance population, 42 percent of the target group (compared to 30 percent in the case of the larger target group) are families that would be expected to become homeless over a 12 month period.

TABLE 3

Percentage of PA Population That Must Be Targeted to Identify 50% of Homeless Families

Models:	
Admin. Only	13%
Easy to Obtain	9%
Complete Model	5%

*In some cases slightly more or less than 50% are targeted

Percentage of Homeless Families Identified When Target Group is 5% and 3% of PA Population by Model

	Percentage of PA Families Targeted	
	5%	3%
Admin. Only	35%	24%
Easy to Obtain	38%	30%
Complete Model	51%	42%

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

The choice of how large a target group to select will depend on the policy goals of HRA. As the target group increases in size, more high risk families will be found. However, services will have to be provided to substantially more families that would not have become homeless in the absence of these services.

Practical Considerations Designing a Forecasting Model

Tables 3 and 4 report further analysis which addresses an important practical concern in judging the accuracy of forecasting models. In general, models become more accurate as more variables are added to the forecasting equations. An important question, however, is whether the increased accuracy is substantial and worth the effort needed to collect a long list of data elements.

We explored this question by re-estimating the forecasting model with various subsets of the variables. We reformulated the model so that it just includes administrative data that would involve no new data collection, and we reformulated the model so that it just uses data elements that are relatively easy to collect. Some of the variables in the "easy" model would require new questioning of clients, but they are not sensitive questions and could be included in recertification interviews. We judged that just some of the administrative data variables are easy to use because a great deal of file manipulation is required to obtain variables such as residential moves and administrative closings.

Table 2 presents the estimated parameters of these smaller forecasting models, and Table 3 presents statistics that allow for comparisons of the accuracy of the smaller models and the complete model. Unfortunately, the smaller models do not perform nearly as well as the complete model. If 5 percent of the public assistance population is targeted using the administrative data model, just 35 percent of all homeless families are included in the target group compared to the 51 percent coverage found with the complete model. The model that uses the easy-to-obtain data performs just slightly better than the administrative data model.

Prior to the start of this project, HRA staff had explored the use of some simple forecasting approaches using two administrative data variables: two or more residential moves and two or more administrative closings. This forecasting model identified 42 percent of all homeless families when 12 percent of the public assistance population is targeted. A good judge of the improvement in forecasting capacity that results from this project's survey data is the finding in Table 4 that the "complete" model can identify the same percentage of homeless families as the two variable model, but the target group can be one quarter the size of the 12 percent group required with the simple model. In terms of actual numbers, this means that when we consider the entire public assistance population of approximately 230,000 families, the high risk target group could be reduced from approximately 28,000 public assistance families (when the simple model is used) to approximately 7,500 families (when the "complete" model is used) and in each case the number of homeless families in the target group would be approximately 4,200. Thus, just 15 percent of the large target group would be families on the pathways to homelessness; for the smaller group, 56 percent of the families would be on the pathways to homelessness.

The final decision regarding the trade-off between ease of implementation and effectiveness at targeting those at risk must be made by officials at HRA. We believe that there is convincing evidence to suggest that with limited effort, a multivariate algorithm can be developed and implemented which would allow for more effective targeting and the possibility of preventive services. Although it is now better understood which factors have greatest predictive power, it is essential to balance predictive power of each variable with an assessment of the political and practical feasibility of using such factors for targeting

IV. LOGIT ANALYSIS

The forecasting analysis reported above is based on statistical models using ordinary least squares (OLS) regression techniques. While OLS estimation results in statistically "consistent" estimators, a common alternative estimation procedure is logistic regression analysis. Logistic regression is often considered a more appropriate procedure when the dependent variable is dichotomous because it is based on a model specification that involves nonlinear relationships between each of the independent variables and the dependent variable. Such a nonlinear relationship often is more appropriate given the bounded nature of a dichotomous dependent variable.

To test the sensitivity of the forecasting analysis to the estimation procedure used, we reestimated the forecasting model using logistic regression analysis and compared the new model with the OLS model. While the significance of individual parameters varies substantially across estimation techniques, little difference was found in the ability of the models to forecast homelessness and those families which are targeted.

The estimated coefficients for the logistic model are compared to those for the ordinary least squares regression model in Table 4 (administrative records variables are not included and thus sample sizes are 1,228). Most important in this table is the finding that fewer logit coefficients are statistically significant than OLS coefficients. The reason for this seems to be a greater sensitivity of the logit procedure to

TABLE 4

Predictors of Homelessness: Weighted Least Squares and Weighted Logistic Models

	Least Squares Model		Logistic Model	
Variables	Coefficients	T–ratio	Coefficients	T–ratio
Constant	0.012	0.562	–3.849	–4.391 *
Prior Shelter Use	0.036	1.947	0.392	0.974
Age	0.000	–0.689	–0.035	–1.466
Disruptions	0.077	3.023 *	1.082	1.763
Ever Evicted	0.037	1.988 *	0.807	1.848
Current Pregnancy	0.120	6.019 *	1.782	4.052 *
Baby Past Year	0.026	1.639	0.676	1.524
Ever Detox	0.080	2.395 *	1.832	1.374
Ever SSC	0.058	1.667	0.907	0.969
Ever Doubled	0.024	2.252 *	1.033	2.164 *
Two Moves	0.066	2.941 *	0.582	1.383
Prev. Primary Tenant	0.115	3.967 *	1.707	2.743 *
Stay with Parents	0.013	0.625	0.326	0.561
Stay with Others	0.077	3.645 *	1.375	2.954 *
Hispanic	–0.017	–1.564	–0.620	–1.642
White/Other	–0.022	–1.187	–0.868	–1.228

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

* --Indicates significance at the .05 level.

intercorrelations among the data. Virtually every one of the logit coefficients is significant when slightly smaller versions of the model (i.e., with fewer independent variables) are estimated. The logit coefficients are very sensitive to the inclusion of other correlated variables.

It should be emphasized that the two sets of coefficients reported in Table 4 are not directly comparable. The OLS coefficients reflect the incremental effects of a given variable on the risk of homelessness. Thus, for example, the .036 coefficient on the prior shelter use variable in the OLS model implies that families that had a previous shelter experience (i.e., SHELTER = 1) have a predicted risk of shelter use that is 3.6 percentage points higher than families which have not used shelters in the past.

The coefficients from the logistic regression, however, cannot be interpreted in the same manner as the OLS coefficients because of the non-linear nature of logit analysis. The incremental effects of a given variable on the risk of homelessness depend on the value of other variables for each individual. Because of this, the logit coefficients are used to estimate incremental effects for different types of sample members using appropriate statistical transformations.

The nature of the logistic model is such that incremental effects tend to be small when a given family has characteristics that place it at very low risk of homelessness. However, incremental effects of each variable on risk of homelessness are larger for families that have multiple risk factors.

Table 5 presents the incremental effects of each variable on the risk of homelessness using the logistic model. The incremental effects are calculated for seven subgroups of families: the public assistance comparison sample, families which have been evicted at least once in the past, former shelter users, families headed by females who were pregnant at the time of interview, families which have experienced three or more disruptive events, families which have had contacts with SSC, and families which have experienced at least one episode of being "doubled up."

As expected, the incremental effects of each risk factor are very small for the overall comparison sample. This is because the comparison sample, on average, is at very low risk of homelessness. The interactive specification of the logit model suggests that when few risk factors are present, the marginal effect of any one risk factor is very small. In other words, it seems to take multiple risk factors, all interacting with one another, to increase risk of homelessness. This is seen by comparing the incremental effects of each factor for former shelter users, who tend to have multiple risk factors, with the incremental effects for the overall comparison sample. For the previous shelter users, we find that having been in a detox program increases the risk of new shelter use by 26.6 percentage points. By contrast, for the comparison sample, a detox

TABLE 5

Marginal Effects of Homelessness Risk Factors for Selected Subgroups

Variables	Comparison PA Group	Evicted Families	Former Shelter Users	Pregnant Head of Household	3 or more Disruptive Experiences	Families with SSC Contact	Doubled up Families
Constant	−0.042	−0.251	−0.559	−0.299	−0.502	−0.635	−0.164
Prior Shelter Use	0.004	0.026	0.057	0.030	0.051	0.065	0.017
Age	0.000	−0.002	−0.005	−0.003	−0.005	−0.006	−0.001
Disruptions	0.012	0.071	0.157	0.084	0.141	0.178	0.046
Ever Evicted	0.009	0.053	0.117	0.063	0.105	0.133	0.034
Current Pregnancy	0.019	0.116	0.259	0.138	0.232	0.294	0.076
Baby Past Year	0.007	0.044	0.098	0.052	0.088	0.111	0.029
Ever Detox	0.020	0.120	0.266	0.142	0.239	0.302	0.078
Ever SSC	0.010	0.059	0.132	0.070	0.118	0.150	0.039
Ever Doubled	0.011	0.067	0.150	0.080	0.135	0.170	0.044
Two Moves	0.006	0.038	0.084	0.045	0.076	0.096	0.025
Prev. Primary Tenant	0.018	0.111	0.248	0.132	0.222	0.281	0.073
Stay with Parents	0.004	0.021	0.047	0.025	0.042	0.054	0.014
Stay with Others	0.015	0.090	0.200	0.107	0.179	0.227	0.058
Hispanic	−0.007	−0.040	−0.090	−0.048	−0.081	−0.102	−0.026
White/Other	−0.009	−0.057	−0.126	−0.067	−0.113	−0.143	−0.037

Source: Health Research Program tabulations from the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

Note: Coefficients reported represent the incremental effects on the probability of homelessness associated with each factor as evaluated at the mean subgroup characteristics of all other variables. For a logit model, the coefficients are computed using the following formula:

Coefficient = B * P(Z) * (1 − P(Z)), where
P(Z) = e /(1 + e) and Z = X * B and
B is the vector of logit coefficients and X is the vector of mean valued characteristics.

experience raises the risk of homelessness by just 2.0 percentage points.

The logit estimation approach results in a series of estimates of incremental effects that vary across types of families. By contrast, the OLS approach reports average impacts of each factor across the entire sample.

From a forecasting point of view, the key question is whether the assumptions implied by the logit specification result in better targeting potential than the assumptions implied by ordinary least squares. We found very little difference in the targeting potential of the two estimation procedures. For example, with the OLS approach we reported that by targeting 7.2 percent of the total public assistance population it is possible to identify 57.8 percent of all homeless families. With the logit approach, targeting 6.5 percent of the public assistance population accounts for 58.7 percent of the homeless families.

The logit approach is more efficient at targeting, but only marginally so. Importantly, the two approaches target virtually the same families and identify virtually the same subsets of the homeless. For example, 83 percent of the homeless families targeted using the logit approach also are targeted with the OLS approach. Thus, it seems that the two estimation procedures result in forecasts that are very similar. If implementation concerns are ignored, the logit approach is slightly preferable. However, the decision about which model to use in an early warning system should be based on ease of implementation. This issue will be addressed in the report on the early warning system.

V. CONCLUSIONS

The findings presented here refine the portrait of homeless families that we presented in our earlier descriptive report. The data from the NYU-Harris survey of homeless families conducted during the first half of 1988 indicate that homeless families have a large number of social problems that seem to work as a group to lead to a need to use the city shelter system. The analysis reported here begins to pinpoint exactly what risk factors, social problems, and family characteristics put a public assistance family at high risk of needing to use the public shelter system.

Being doubled up with others emerges as perhaps the strongest predictive variable. We have measured this factor in a number of ways, and even when the various dimensions of being doubled up are considered simultaneously, they each predict shelter use (e.g., both being doubled up in the past and being doubled up in the current year independently affect shelter use).

Other key housing characteristics that predict homelessness are frequent moves, prior shelter use, and being late with rent payments. Although these factors are somewhat correlated, the multivariate model indicates that they each have independent and cumulative effects on risk of shelter use.

In addition to housing factors, key risk factors predicting shelter use in a multivariate context are:

* prior use of detox programs,

* prior use of SSC caseworkers,

* three or more socially disruptive experiences (e.g., being sexually abused as a child or physically abused by a boyfriend), and

* current pregnancy.

In addition to identifying key predictors of homelessness for public assistance families, the analysis presented in this report demonstrates how these predictor factors can be used to develop a small target group of families that will include 50 percent of all families on the pathways to homelessness. The forecasting model developed here can target just 5 percent of the public assistance population in identifying 50 percent of high risk families. Or, a smaller target group that includes just 3 percent of the public assistance population can be identified, and 42 percent of high risk families will be identified.

This report demonstrates that an effective targeting strategy is technically feasible. What remains to be considered is what public initiatives might be adopted to actually reduce the need for shelter use among the targeted group of high risk families. The implications of the forecasting analysis for policy considerations is the focus of the fourth volume of this Final Report.

APPENDIX A

OVERVIEW OF DATA COLLECTION METHODOLOGY

(Excerpted from: "A Study of Homeless Families in New York City: Characteristics and Comparisons With Other Public Assistance Families," New York University, Urban Research Center, October 1988, Page 8 - 13).

The main purpose of this study is to assess differences between families on public assistance who eventually require emergency housing and those who do not. In order to meet this objective, a 25-minute interview, assessing such risk factors as housing conditions, social history, family contacts and demographic characteristics was administered to 704 families on Public Assistance (PA) requesting shelter and 524 families on PA not currently in need of emergency housing.

Families requesting shelter were interviewed at the Emergency Assistance units (EAUs) in Brooklyn, Manhattan, and the Bronx. The survey of public assistance families not in need of shelter took place at Income Maintenance Centers (IMC) during quarterly face-to-face recertifications.

The EAU Sample

Data were collected from families on public assistance who requested shelter through the Emergency Assistance Units (EAUs), for the purpose of identifying key differences between EAU and IMC groups. The city's four Emergency Assistance Units are open between 4 p.m. and 4 a.m., seven days a week. Anyone seeking shelter or emergency assistance other than medical care is directed to one of these units. A 10 day pilot study revealed that only a small number of people requested shelter through the Queens EAU and, therefore, it was eliminated from the study. It was also discovered during the early stages of the fieldwork that almost all persons requesting shelter did so between 5 p.m. and 11 p.m., Monday through Friday; interviews were limited to these hours between February 19 and July 15, 1988.

Interviewers screened respondents while they waited to go through the intake procedures at the EAUs. Interviewers approached respondents, told them about the study, and screened them to determine whether or not the family was eligible for participation. Only those individuals who 1) were currently on public assistance or had been on public assistance during the last six months, 2) had not been in a shelter for at least 31 days and 3) had children (or were pregnant) at the time of their request for shelter were deemed eligible for inclusion in the sample. This ensured that the sample was comprised solely of welfare families for whom this was a new episode of shelter entry. All those who agreed to participate were asked to sign a written consent form which guaranteed the confidentiality of the interview.

All told, 6,526 individuals were screened at the EAUs and 972 (15%) met the eligibility requirements. A great many of those screened had been in the shelters at some time during the last month. Of these, 704 (72%) were interviewed. The disposition of individuals approached in the EAUs is shown on the next page.

FINAL EAU SAMPLE DISPOSITION

Number of Individuals Screened	6,526
Number Meeting Criteria	972
Completes	704
Refusals	268
Total	8,470

RESPONSE RATE: 72%

The IMC Sample

A total of 448 families on public assistance were selected and interviewed at the income maintenance centers (IMCs) during the first three weeks of March and April, 1988. Families selected for inclusion in the study were identified in three stages. First, twelve of the 40 IMCs were randomly selected for inclusion in the study with sampling probability proportionate to size. In order to insure as unbiased a sample as possible, two days of each week (excluding weekends) were randomly selected for interviewing at each IMC. Interviewing took place between 9 a.m. and 3 p.m.

A quota of approximately 35 interviews per IMC was established. Since "high risk" cases are seen in the first week of the three week eligibility period each month, quotas for each week of the data collection period were established to insure an equal distribution of cases during the entire recertification

period. A list of sampled IMCs can be found in Appendix A of this document.

At each site, twelve eligibility specialists in the undercare section were randomly selected. A list of sampled workers was provided to the interviewers. Interviewers selected specific cases by approaching the first of the twelve selected eligibility specialists and determining whether or not that particular worker had a scheduled eligibility appointment during the first hour of interviewing (9-10 AM). If the first specialist on the list had no appointments during that hour, interviewers were instructed to go to eligibility specialist number two and determine whether or not this person had an appointment for that hour, and so forth, until an eligible respondent was located for hour number one. When the first interview had been completed, interviewers were instructed to select the next eligibility specialist on their list, following the one who had just provided an eligible respondent.

Respondents were referred to the interviewers by their eligibility specialists. The interviewers explained the nature of the study to potential respondents and requested their participation. Individuals who agreed to participate were asked to sign New York University's human subjects' written consent form before being were interviewed.

In addition to using this method to interview those heads of families who arrived for their scheduled appointments, interviewers were required to enumerate those families who did not show up for their recertification appointment. Overall, approximately 10% of the appointments among sampled eligibility specialists were "no shows". A quota of approximately 40 interviews with families who did not show up for their appointments -- proportional to the overall number of "no-shows" -- was established in order to develop as representative a sample as possible. Respondents in these families were interviewed during a rescheduled visit or by telephone.

A total of 745 families scheduled for their recertification appointments were selected for the study, using the hourly rotation method described above. A total of 524 selected families agreed to participate in the study, for an overall response rate of 70 percent. These figures include a total of 36 families who did not show up for their original appointment and who were interviewed during their re-scheduled appointment at the IMC (28 cases) or by phone (8 cases).

The 524 public assistance respondents include an oversample of 76 Black respondents who were surveyed using the procedures described above at the Brownsville and Bushwick IMC's to insure stability of ethnic comparisons. Such oversampling was

necessitated by the fact that the original sample did not include a sufficient number of blacks to permit subgroup analyses.[1]

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[1] Questions have been raised about the "true" ethnic distribution of the AFDC population in New York City. The sampling technique described above yielded the following distribution: 48% Puerto Rican, 22% other Hispanic, 20% black, and 3% other. This is substantially different from other estimates of this population. For example, according to data from the 1987 Housing and Vacancy Survey, 38% of the public assistance households (families and singles) are black, 36% Puerto Rican, 17% white, and 9% "other." However, there are questions raised by these estimates; for example, how would these estimates change if a category for non-Puerto Rican Hispanics was included, as it was in this study? Estimates for the New York City population, as a whole, are that there are as many non-Puerto Rican Hispanics as there are Puerto Rican Hispanics. In this case, the ethnic breakdown of the AFDC population, obtained by the IMC sampling technique, would seem accurate. In any case, different weighting formulas were applied to the data set, to adjust for possible biases in the ethnic composition. Weighting had little effect on the analyses and the decision was made to present unweighted analyses only.

APPENDIX B: GLOSSARY

PREVIOUS PRIMARY TENANT:
Respondent was a primary tenant for at least a one year period, but not at the place stayed at longest during the past year. For each of the "family type" variables, the reference group includes families who were primary tenants at the place stayed at longest last year.

STAYED WITH PARENTS:
Respondent has never been a primary tenant and stayed with parents for the longest time during the last year.

STAYED WITH OTHERS:
Respondent has never been a primary tenant and has not lived with their parents for the longest time during the past year.

TWO MOVES:
Respondent has moved at least twice during the past year.

EVER EVICTED:
Since having children or becoming pregnant, respondent has been evicted.

EVER DOUBLED:
Since having children or becoming pregnant, respondent has lived together with another person or family.

PRIOR SHELTER:
Respondent has previously been in a shelter or welfare hotel.

EVER DETOX:
At some time, respondent has been enrolled as a patient in a detox or treatment center for drug or alcohol abuse.

EVER SSC:
At some time, respondent has had a caseworker from Special Services for Children (SSC) or the Bureau of Child Welfare (BCW).

DISRUPTIONS:
Respondent experienced at least three of the following nine disruptive experiences:

Before turning 18 years old:
- lived in a foster home
- lived in an institution or group home

- ran away from home, a group home, or institution for a week or more
- lived on the street, a public place, an abandoned building, the subway, or a similar place
- been physically abused
- been sexually abused

As an adult:
- been physically abused or threatened with violence by a person the respondent was involved with.

Within the past year:
- stopped living with a boyfriend
- told to leave by parents.

CURRENT PREGNANCY:
Respondent was pregnant at time of interview.

BABY PAST YEAR:
Respondent gave birth within the past year.

FREQ CLOSE:
Family has experienced two or more administrative closings during the life of the case.

BONUS ADM:
Family is receiving a bonus payment as a result of child support payments.

RECOUPAD:
Family is having funds recouped by the agency, typically as the result of an earlier emergency payment.

FOSTER:
Head of family had been in foster care before turning age 18.

INSTITUTION:
Head of family had been in an institution or group home before turning age 18.

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Prepared for:
The Human Resources Administration

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NOTE ON STRUCTURE OF THE REPORT

This report is one volume of the Final Report for the New York University Study of Homeless Families that has been conducted for the New York City Human Resources Administration. The Final Report is comprised of four distinct volumes:

Volume 1: A STUDY OF HOMELESS FAMILIES IN NEW YORK CITY: RISK ASSESSMENT MODELS AND STRATEGIES FOR PREVENTION.

Volume 2: A STUDY OF HOMELESS FAMILIES IN NEW YORK CITY: CHARACTERISTRICS AND COMPARISONS WITH OTHER PUBLIC ASSISTANCE FAMILIES.

Volume 3: FORECASTING MODELS TO TARGET FAMILIES AT HIGH RISK OF HOMELESSNESS.

Volume 4: IMPLICATIONS OF THE NYU STUDY OF HOMELESS FAMILIES FOR PUBLIC POLICY.

TABLE OF CONTENTS

Page

I. INTRODUCTION....................................1

II. POLICY IMPLICATIONS OF TARGETING STRATEGY............5

III. STRATEGIES FOR PRIORITIZING AMONG THOSE TARGETED....9

IV. POSSIBLE INTERVENTION STRATEGIES....................12

Housing Alert..12
Legal Services/Eviction Prevention Model.............16
Entitlement "buffers"................................17
Resettlement and Community Supports................ 18
Detoxification Programs............................ 19
Mental Health Programs...............................19
Parenting Programs and Family Planning Services... 20
Foster Care..21
The Problems of Black Families.......................21

V. CONCLUSIONS...22

I. INTRODUCTION

This report explores the policy implications of the findings from a study of 704 families requesting shelter and 524 housed public assistance families in New York City. The study upon which this discussion is based was conducted by New York University's Urban Research Center under contract to New York City's Human Resources Administration (HRA); data for this study were collected during the first half of 1988.

HRA is responsible for providing shelter despite the extreme limitations of New York City's low income housing market. Managing this problem requires that HRA be able to effectively and efficiently target interventions that will ameliorate the effects of crowding, displacement, and inadequacy that accompany the current housing situation. HRA contracted with NYU to assist them in this endeavor. The primary goal of the study was to develop a model for identifying those families at greatest risk of becoming homeless. The study combines data gathered during face-to-face interviews conducted at Emergency Assistance Units and Income Maintenance Centers with data gathered from HRA's administrative records. This combined data set, which includes housing, social ties, health, education, and welfare factors, provides an in-depth look at the lives of families requesting emergency housing. It provides insight into the problems that have characterized the lives of those who request shelter and suggests strategies that might be used to prevent shelter entry.

Companion reports provide in-depth discussion of the characteristics of homeless families as compared to their housed counterparts, and present in detail the results of the forecasting and targeting exercises. This report focuses on the policy options available to the agency, once forecasting and targeting have been undertaken. Recommendations are based on findings regarding both the composition of the homeless families population and those factors which place families at greatest risk of needing emergency housing.

Table 1 presents the distribution of many of these variables across the housed and homeless families and provides the probability of shelter use associated with each of them. There are a number of key findings which help shape this discussion of policy options.

* Most families precede their entry into shelter with a period of being doubled-up. Only 18% of families requesting shelter had spent the previous evening in their own apartment.

* Living with others is an important predictor of shelter use. In fact, 44% of the sample were neither primary tenants last year, nor were they ever primary tenants for a period of a year. An additional 20% had once been primary tenants, but not at the place they stayed the longest last year.

* The shelter system experiences significant repeat utilization. Nearly one-third of those requesting shelter had been users of the emergency housing system some time in the past.

Table 1
Descriptive Statistics for Potential Predictors of Homelessness

	SAMPLE DISTRIBUTION (Unweighted)		PROBABILITY OF SHELTER USE (Unweighted)
	EAU	IMC	
HOUSING:			
PRIMARY TENANTS AT PLACE STAYED LONGEST LAST YEAR	36.5%	85.5%**	1.5%**
ONCE WERE PRIMARY TENANTS BUT NOT AT PLACE STAYED LONGEST LAST YEAR	19.0%	2.7%	19.7%
NEVER HAVE BEEN PRIMARY TENANTS:			
STAYED WITH PARENTS FOR LONGEST PERIOD LAST YEAR	14.3%	6.1%	7.5%
STAYED WITH OTHERS FOR LONGEST PERIOD LAST YEAR	30.2%	5.7%	15.4%
MORE THAN 3 PERSONS PER BEDROOM LAST YEAR	83.5%	74.4%**	3.7%
NOT LIVED IN CROWDED SITUATION	16.5%	25.6%	2.2%
REGULATED HOUSING: HPD, PROJECTS, SECTION 8	7.5%	27.9%**	0.9%*
NON-REGULATED HOUSING	92.5%	72.1%	4.2%
LIVED IN A RENT CONTROLLED APARTMENT	21.4%	47.9%**	1.5%**
DID NOT LIVE IN RENT CONTROLLED APARTMENT	78.6%	52.1%	4.9%
MOVED AT LEAST TWICE WITHIN PAST YEAR	31.4%	5.0%**	17.9%**
MOVED ONE TIME OR LESS IN PAST YEAR	68.6%	95.0%	2.4%
HAVE BEEN DOUBLED-UP LIVING WITH OTHERS AT SOME TIME SINCE HAVING CHILDREN	81.1%	38.2%**	6.8%**
HAVE NEVER BEEN DOUBLED-UP	18.9%	61.8%	1.0%
EVER EVICTED	23.3%	7.1%**	10.2%**
NEVER EVICTED	76.7%	92.9%	2.8%
EVER LATE IN RENT PAYMENTS FOR 2+ MONTHS	22.9%	21.6%**	3.5%
NEVER LATE IN RENT PAYMENTS	64.5%	71.7%	2.4%
NEVER HAVE PAID RENT	12.6%	6.7%	6.1%
EVER TWO OR MORE POOR BUILDING CONDITIONS	46.6%	37.8%**	4.1%
ONE OR LESS POOR BUILDING CONDITIONS	53.4%	62.2%	2.9%
PREVIOUS SHELTER USE	31.5%	7.6%**	12.4%**
NO PRIOR SHELTER	68.5%	92.4%	2.5%
PARENTING:			
PREGNANT	34.5%	5.5%**	17.7%**
NOT PREGNANT	65.5%	94.5%	2.3%
HAD A BABY WITHIN PAST YEAR	26.0%	10.7%**	7.7%**
NO NEW CHILD	74.0%	89.3%	2.8%
HAD A CHILD BEFORE AGE 18	36.8%	23.7%**	5.0%*
DID NOT HAVE CHILDREN BEFORE AGE 18	63.2%	76.3%	2.8%
HEALTH, MENTAL HEALTH AND SUBSTANCE ABUSE:			
HEALTH PROBLEM LAST YEAR	17.5%	23.1%**	2.5%
NO HEALTH PROBLEM	82.5%	76.9%	3.6%
TOOK YOUNGEST FOR A WELL CHILD EXAM IN PAST YEAR	78.6%	72.5%**	3.6%
NO WELL CHILD EXAM	21.4%	27.5%	2.6%
NERVOUS PROBLEM LAST YEAR	10.4%	16.0%**	2.2%
NO NERVOUS PROBLEM	89.6%	84.0%	3.5%
OVERNIGHT ADMISSION TO MENTAL HOSPITAL	4.1%	1.0%**	12.9%*
NEVER ADMITTED TO MENTAL HOSPITAL	95.9%	99.0%	3.2%
REPORTED PROBLEM WITH SUBSTANCE ABUSE IN PAST 6 MONTHS	4.8%	1.1%**	12.7%**
DID NOT REPORT A PROBLEM	95.2%	98.9%	3.2%
EVER PATIENT IN DETOX CENTER FOR DRUG OR ALCOHOL ABUSE	8.2%	1.9%**	12.9%**
NEVER DETOX PATIENT	91.8%	98.1%	3.1%

Table 1 (con't.)

Descriptive Statistics for Potential Predictors of Homelessness

	SAMPLE DISTRIBUTION (Unweighted)		PROBABILITY OF SHELTER USE (Unweighted)
	EAU	IMC	
EDUCATION, WORK AND WELFARE:			
COMPLETED 12 OR MORE YEARS OF EDUCATION	39.6%	36.8%	3.6%
COMPLETED FEWER THAN 12 YEARS	60.4%	63.2%	3.2%
WORKED FULL-TIME FOR ONE YEAR OR MORE	33.4%	40.1%**	2.8%
NO FULL-TIME WORK	66.6%	59.9%	3.7%
PARENTS WERE ON PUBLIC ASSISTANCE	51.8%	31.1%**	5.4%**
PARENTS WERE NOT ON PUBLIC ASSISTANCE	48.2%	68.9%	2.3%
EVER HAD A SSC CASEWORKER	8.9%	1.7%**	15.2%**
NEVER HAD A SSC CASEWORKER	91.1%	98.3%	3.1%
CURRENTLY ENROLLED IN WIC - NEW BABY OR PREGNANT	24.3%	9.5%**	8.1%**
NOT ENROLLED - NEW BABY OR PREGNANT	30.4%	6.3%	14.2%
NO NEW BABY OR NOT PREGNANT	45.3%	84.2%	1.8%
SOCIAL SUPPORTS:			
THREE OR MORE DISRUPTIVE SOCIAL EXPERIENCES	18.5%	3.4%**	15.6%**
LESS THAN THREE DISRUPTIVE EXPERIENCES	81.5%	96.6%	2.8%
PARENTS TOLD YOU TO LEAVE WITHIN PAST YEAR	15.1%	1.1%**	31.1%**
NOT TOLD TO LEAVE	84.9%	98.9%	2.9%
DEMOGRAPHICS:			
30 YEARS OF AGE AND YOUNGER	72.0%	38.5%**	6.0%**
OVER 30 YEARS OF AGE	28.0%	61.5%	1.5%
BLACK	54.0%	31.9%**	5.5%**
HISPANIC	39.5%	59.5%	2.2%
OTHER RACE	6.5%	8.6%	2.6%
ADMINISTRATIVE VARIABLES:			
TWO OR MORE ADMINISTRATIVE CLOSINGS	56.2%	28.2%**	6.2%**
NONE OR ONE CLOSING	43.8%	71.8%	2.0%
FAMILY CURRENTLY HAS ASSISTANCE CHECK REDUCED TO REPAY	2.8%	2.5%	3.5%
HRA FOR ADVANCED PAYMENTS	91.2%	97.5%	3.2%
FAMILY NOT CURRENTLY BEING RECOUPED			
FAMILY RECEIVES BONUS PAYMENT FOR SUPPORT PAYMENTS	2.4%	12.3%**	0.6%**
NO BONUS PAYMENT DUE	97.6%	87.7%	3.5%
HOUSEHOLD HEAD UNDER 30:			
FAMILY ON WELFARE FOR FIVE OR MORE YEARS	37.7%	44.4%**	5.0%
FAMILY ON WELFARE FOR UNDER FIVE YEARS	62.3%	55.6%	6.5%
HOUSEHOLD HEAD OVER 30:			
FAMILY ON WELFARE FOR FIVE OR MORE YEARS	25.4%	36.4%**	1.2%
FAMILY ON WELFARE FOR UNDER FIVE YEARS	74.6%	63.4%	2.0%

* p<.1 for chi square test of significance for differences in percentages across samples.
** p<.05 for chi square test of significance for differences in percentages across samples.

Sample sizes: EAU: 704, IMC: 524. For administrative variables, data could not be obtained for 131 families; sample sizes are: EAU: 618, IMC: 479.

Source: Health Research Program tabulations from HRA administrative records and the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

* Eviction is an important contributor to shelter use for those who had their own apartment. Among those families which had been primary tenants, 32 percent left the place where they had been primary tenants due to eviction.

* A surprisingly large proportion of the shelter requesters are women who are pregnant or have new babies. This is especially true of those under age 25, where 66% of the requesters were either pregnant or had new babies.

* Disruptive experiences during both childhood and adulthood elevate the likelihood of shelter use. Nearly one-third of those requesting shelter had experienced a serious disruption as a child, including foster care, institutionalization, sexual or physical abuse, and having been a runaway.

* Relatively few of the homeless families report problems with substance or alcohol abuse, but those who do report such problems are at elevated risk. Eight percent of the homeless report having been in a detoxification program; their risk of homelessness is high.

* Young families are at particular risk of becoming homeless because they are more likely to have weak ties to the housing market and to have experienced other factors (e.g., pregnancy) that are associated with risk of shelter use.

* Black families are more likely to seek emergency housing than other families since, among other factors, they are less likely to have been primary tenants and are more likely to have experienced prior shelter use.

* Frequent administrative closings are an important indicator of risk of shelter use. However, their impact on shelter use is indirect.

* Although family size is not associated with increased risk of shelter use, large families do experience longer stays once they enter into the shelter system.

* Mental health problems are rarely reported by homeless families. Only 5 percent of the homeless households reports an overnight stay in a mental hospital. However, for those who have spent time in such a facility, risk of shelter use is very high.

* Neither work history or educational attainment are associated with risk of shelter use. Low levels of educa-

tional attainment and lack of work history are typical of both the housed and homeless groups.

These findings help to inform our exploration of available options for preventing homeless. In addition, to aid us in this discussion, we have created five categories of homeless families for whom successful interventions are likely to be distinctive. These categories are based on the family's ties to the housing market and therefore relate to the likelihood of a family being permanently stabilized in their existing living situation.

The categories are as follows:

* Primary tenants for the most of last year:
  37% of all families requesting shelter

    * Left for reasons of eviction or rent payment - 18%
    * Left for other reasons - 19%

* Once were primary tenants, but not for most of last year:
  19% of all families requesting shelter

* Never have been primary tenants for a period of a year:
  44% of all families requesting shelter

    * Spent most of last year with parents - 14%
    * Spent most of last year with others - 30%

These categories will be used in discussing the appropriateness of various strategies for prioritizing among those at risk of homelessness and in assessing the potential efficacy of various interventions.

II. POLICY IMPLICATIONS OF TARGETING STRATEGY

Although earlier work from this project has demonstrated the technical feasibility of effectively targeting those public assistance families at greatest risk of becoming homeless, certain policy implications should be recognized in these targeting strategies. No targeting strategy will be 100 percent effective at identifying those at risk. In fact, our best forecasting model, which in earlier work we have called the "complete" model since it incorporates data from both the survey and administrative records, has the potential to identify half of those at risk of homelessness in a target pool which includes five percent of all public assistance families. Therefore, if the targeting method selected is only expected to identify half of those at risk, we must ask, "which half?" That is, are we systematically including some types of at-risk families within our target group, while systematically ignoring others? And, if so, what are the implications of this for providing effective interventions?

The data presented in Table 2 can be used to examine these questions. Table 2 provides descriptive data on a number of characteristics of homeless families. Column one provides the distribution of these characteristics, many of which are risk factors for homelessness, for the entire EAU sample. The rest of the table provides these data for those shelter requesters who

Table 2
Descriptive Statistics for Potential Predictors of Homelessness
Target Subgroups

	SAMPLE DISTRIBUTION	"COMPLETE" MODEL		"EASY" MODEL	
	EAU	3% TARGET	5% TARGET	3% TARGET	5% TARGET
HOUSING:					
PRIMARY TENANTS AT PLACE STAYED LONGEST LAST YEAR	37.2%	18.6%	19.4%	29.4%	27.1%
EVICTED/RENT PROBLEMS	18.0%	9.3%	10.4%	13.0%	12.8%
BUILDING PROBLEMS/CRIME	19.2%	9.3%	9.0%	16.5%	14.3%
ONCE WERE PRIMARY TENANTS BUT NOT AT PLACE STAYED LONGEST LAST YEAR	19.0%	32.1%	29.5%	19.9%	20.1%
NEVER HAVE BEEN PRIMARY TENANTS:					
STAYED WITH PARENTS FOR LONGEST PERIOD LAST YEAR	14.3%	8.3%	10.7%	16.5%	18.7%
STAYED WITH OTHERS FOR LONGEST PERIOD LAST YEAR	29.5%	41.0%	40.5%	34.2%	34.1%
MORE THAN 3 PERSONS PER BEDROOM LAST YEAR	83.5%	81.7%	82.7%	82.7%	83.2%
NOT LIVED IN CROWDED SITUATION	16.5%	18.3%	17.3%	17.3%	16.8%
REGULATED HOUSING: HPD, PROJECTS, SECTION 8	7.5%	3.4%	3.8%	6.1%	5.9%
NON-REGULATED HOUSING	92.5%	96.6%	96.2%	93.9%	94.1%
LIVED IN A RENT CONTROLLED APARTMENT	21.4%	10.0%	10.7%	15.2%	13.6%
DID NOT LIVE IN RENT CONTROLLED APARTMENT	78.6%	90.0%	89.3%	84.8%	86.4%
MOVED AT LEAST TWICE WITHIN PAST YEAR	31.4%	58.6%	54.3%	44.6%	42.9%
MOVED ONE TIME OR LESS IN PAST YEAR	68.6%	41.4%	45.7%	55.4%	57.1%
EVER EVICTED	23.3%	27.6%	27.2%	20.3%	20.9%
NEVER EVICTED	76.7%	72.4%	72.8%	79.7%	79.1%
EVER TWO OR MORE POOR BUILDING CONDITIONS	46.6%	55.5%	53.2%	51.9%	49.5%
ONE OR LESS POOR BUILDING CONDITIONS	53.4%	44.5%	46.8%	48.1%	50.5%
PREVIOUS SHELTER USE	31.5%	53.1%	49.7%	54.1%	51.3%
NO PRIOR SHELTER	68.5%	46.9%	50.3%	45.9%	48.7%
PARENTING:					
PREGNANT	34.5%	60.0%	56.6%	78.4%	75.5%
NOT PREGNANT	65.5%	40.0%	43.4%	21.6%	24.5%
HAD A BABY WITHIN PAST YEAR	26.0%	28.3%	29.5%	31.2%	30.8%
NO NEW CHILD	74.0%	71.7%	70.5%	68.8%	69.2%
HAD A CHILD BEFORE AGE 18	36.8%	45.9%	45.4%	45.9%	43.6%
DID NOT HAVE CHILDREN BEFORE AGE 18	63.2%	54.1%	54.6%	54.1%	56.4%
HEALTH, MENTAL HEALTH AND SUBSTANCE ABUSE:					
HEALTH PROBLEM LAST YEAR	17.5%	20.3%	20.5%	21.2%	19.4%
NO HEALTH PROBLEM	82.5%	79.7%	79.5%	78.8%	80.6%
TOOK YOUNGEST FOR A WELL CHILD EXAM IN PAST YEAR	78.6%	73.1%	75.7%	74.5%	73.6%
NO WELL CHILD EXAM	21.4%	26.9%	24.3%	25.5%	26.4%
NERVOUS PROBLEM LAST YEAR	10.4%	13.1%	12.4%	11.7%	11.4%
NO NERVOUS PROBLEM	89.6%	86.9%	87.6%	88.3%	88.6%
OVERNIGHT ADMISSION TO MENTAL HOSPITAL	4.1%	7.6%	6.6%	5.6%	4.8%
NEVER ADMITTED TO MENTAL HOSPITAL	95.9%	92.4%	93.4%	94.4%	95.2%
REPORTED PROBLEM WITH SUBSTANCE ABUSE IN PAST 6 MONTHS	4.8%	10.0%	8.4%	10.4%	9.2%
DID NOT REPORT A PROBLEM	95.2%	90.0%	91.6%	89.6%	90.8%
EVER PATIENT IN DETOX CENTER FOR DRUG OR ALCOHOL ABUSE	8.2%	17.6%	14.7%	19.9%	17.2%
NEVER DETOX PATIENT	91.8%	82.4%	85.3%	80.1%	82.8%

Table 2 (con't)

Descriptive Statistics for Potential Predictors of Homelessness
Target Subgroups

	SAMPLE DISTRIBUTION	"COMPLETE" MODEL		"EASY" MODEL	
	EAU	3% TARGET	5% TARGET	3% TARGET	5% TARGET
EDUCATION, WORK AND WELFARE:					
COMPLETED 12 OR MORE YEARS OF EDUCATION	39.6%	34.5%	34.7%	37.7%	36.2%
COMPLETED FEWER THAN 12 YEARS	60.4%	65.5%	63.3%	62.3%	63.8%
WORKED FULL-TIME FOR ONE YEAR OR MORE	33.4%	33.1%	31.5%	31.2%	32.2%
NO FULL-TIME WORK	66.6%	66.9%	68.5%	68.8%	67.8%
PARENTS WERE ON PUBLIC ASSISTANCE	51.8%	56.2%	55.5%	57.6%	59.3%
PARENTS WERE NOT ON PUBLIC ASSISTANCE	48.2%	43.8%	44.5%	42.4%	40.7%
EVER HAD A SSC CASEWORKER	8.9%	14.1%	14.2%	15.6%	13.6%
NEVER HAD A SSC CASEWORKER	91.1%	85.9%	85.8%	84.4%	86.4%
SOCIAL SUPPORTS:					
THREE OR MORE DISRUPTIVE SOCIAL EXPERIENCES	18.5%	38.6%	34.4%	32.0%	30.0%
LESS THAN THREE DISRUPTIVE EXPERIENCES	81.5%	61.4%	65.6%	68.0%	70.0%
PARENTS TOLD YOU TO LEAVE WITHIN PAST YEAR	15.1%	18.6%	19.1%	18.2%	18.7%
NOT TOLD TO LEAVE	84.9%	81.4%	80.9%	81.8%	81.3%
DEMOGRAPHICS:					
30 YEARS OF AGE AND YOUNGER	72.0%	79.0%	79.2%	82.3%	84.6%
OVER 30 YEARS OF AGE	28.0%	21.0%	20.8%	17.7%	15.4%
BLACK	54.0%	59.7%	57.8%	59.3%	56.4%
HISPANIC	39.5%	34.1%	35.8%	33.8%	36.6%
OTHER RACE	6.5%	6.2%	6.4%	6.9%	7.0%

* p<.1 for chi square test of significance for differences in percentages across samples.
** p<.05 for chi square test of significance for differences in percentages across samples.

Sample sizes: EAU: 704, IMC: 524.

For the "complete" model, the 3% target group (that is, 3% of all Public Assistance Families) includes 42% of the EAU sample and the 5% target group includes 51% of the sample. For the "easy" model, the 3% target group captures 30% of the EAU families and the 5% target includes 38% of that sample.

Source: Health Research Program tabulations from HRA administrative records and the 1988 NYU/Harris Survey of Homeless and Public Assistance Families, NYU Homeless Families Project conducted for the NYC Human Resources Administration.

would be included in the target pool if two different forecasting models are used to do the targeting. The first model is what we term the "complete" model; it includes 20 different forecasting variables. The second models is a smaller model that includes just nine forecasting variables, which are relatively "easy" to collect. (For a full discussion of the various models see Volume Three of this report).

Presented in column two are the characteristics of homeless families which would be targeted if the agency were to target three percent of all public assistance families using the complete model; column three provides these same characteristics with a five percent target group. As a source of comparison, columns four and five also provided the characteristics of homeless families in three percent and five percent target groups; however, these were achieved using what we have termed our "easy" model. This model is more limited in its selection of variables than the complete model.

As the data indicate, using a targeting approach focuses the agency's attention on a more needy population. In regard to almost any factor considered, those who have been targeted by either of these models are more likely to be characterized by the risk factors we have identifies in our forecasting analysis. Those targeted by either the "complete" model or the "easy" model are more likely to have been living with others, to have been in a shelter previously, to be pregnant, to have a new baby, or to have been teen mothers. They have more physical and mental health problems and are more likely to have a problem with substance abuse. They are younger and more likely to have experienced disruptive social experiences. Using this kind of targeting strategy leads us to serve a group of families with the highest proportion of problems.

It is noteworthy, however, that although both models cause us to focus on a more troubled population, the two models result in distinctively different target groups. In the case of the "easy" model, which has relatively few variables, one can readily see that those few variables included in the model greatly skew the characteristics of the population that is targeted. For example, the less complete model includes the variable of current pregnancy. Whereas, 34.5 percent of the EAU sample indicated that they were pregnant, 78.4 percent of the homeless families targeted by the "easy" model with a three percent cut-off are pregnant. Using the "complete" model, which incorporates a much broader range of variables, 60.0 percent of those targeted with a three percent cut-off are pregnant.

In order to illustrate the policy implications of applying different targeting models it is useful to look at the five pathways to homelessness described earlier in this report. Using the complete model, we notice that very few families which were primary tenants at the place stayed longest last year have been targeted (less than 20 percent). If we were to couple a targeting strategy based on the complete model with an intervention program aimed at preventing eviction we would have little chance of success. However, if we emphasized policies which tried to find permanent housing for those who have never had their own place and who are living with persons other than their parents (more than 40 percent of the homeless targeted by the complete model), our chances of meeting the target group's needs are greatly enhanced. In contrast, using the easy model results in a target group where the proportion of those who were primary tenants last year is not so dramatically different from the proportion who have never had their own place and are living with persons other than their parents (in the case of a three percent target pool, it is 29 percent and 34 percent, respectively). If we were to target using the easy model, policies looking at such issues as eviction would have a greater potential for success among the target group.

III. STRATEGIES FOR PRIORITIZING AMONG THOSE TARGETED

Among those who have been included within the target group some attention must be paid to their priority for service. Given current resources, HRA may not be able to quickly reach even 5 percent of its caseload (approximately 12,000 families) with enhanced services. Therefore, who should be served first? Or to whom should greatest attention (or resources) be paid? What kinds of criteria can be used to make these decisions and by whom should these decisions be made?

One possible strategy for prioritizing targeted families is to focus on those at greatest risk, that is, those who receive the highest probability score on the forecasting model. Such an emphasis has the benefit of greatest targeting efficiency -- the higher the cut-off score, the greater the likelihood that the person you are targeting is truly at risk of becoming homeless. In this way resources are not "wasted" on large numbers of families falsely identified as being at risk. Such a policy may suffer, however, if the available interventions are too weak to address the needs of those at greatest risk. Although targeting will have been efficient, the interventions may prove unsuccessful. Such families may inevitably enter shelter. The overall success of the program can be seriously impaired if few persons targeted can be prevented from entering the shelter; wasted resources and low caseworker morale would be likely results.

Of note, comparing the characteristics of those families included in a three percent target pool and those included in a five percent pool indicates that there is only a minor increase in the number of families with any given characteristic. As an example, using the complete model, we find that 50 percent of homeless families in a five percent target group had experienced a prior shelter use, as compared to 53 percent in a three percent pool. Similarly, seven percent of those in the five percent target group had an overnight mental hospitalization, as compared to eight percent within the three percent pool. Within this limited range, those who have been targeted by a given model, are likely to vary only modestly from one cut-off point to another.

Another strategy for prioritizing among targeted cases is by type of problem. If we know that the agency has greater success in addressing certain kinds of problems, e.g., eviction, we may wish to target our services at that problem and at those at risk of that problem. Effort might then be focused on those who are currently primary tenants, rather than those who are doubled up. Or eviction prevention programs can be used to supplement the targeting strategy; this may be reasonable response to the "skewing" caused by the targeting models. Another strategy might be to focus on those families with whom the agency feels it can be most effective. This can be done on the basis of objective criteria (e.g., giving priority to those living with their parents, rather than friends) or it can be a decision subjectively made by caseworkers upon interviewing families identified as being at risk.

The final decision among the various targeting strategies is more one of politics and philosophy than it is a technical exercise. This study provides evidence that different targeting approaches will reach different populations. It clearly indicates that the characteristics of the targeted population must be considered in developing preventive services. However, in any targeting strategy, some families will be served, others will not. The implications for equity are great. Who is more "deserving" among those at risk of becoming homeless is not a question that can be answered by researchers, but rather one that must ultimately addressed by agency policy makers and elected officials.

IV. POSSIBLE INTERVENTION STRATEGIES

Although more affordable housing clearly would reduce a substantial portion of the homelessness found among public assistance families, HRA is not in a position to provide it. Therefore, HRA must limit its attention to providing the services traditionally associated with the agency, making the most effective use of available low income housing, and in striving to keep its policies, procedures, and staff development activities in keeping with the overall goal of reducing the incidence of homelessness among the families on its case load.

Housing Alert

The Housing Alert program is one of HRA's most directed efforts for stemming homelessness among public assistance families. The program relies on caseworkers from the Office of Family Services to assess and manage the needs of families that have been identified as being at risk of homelessness. Housing Alert case workers try to ensure that targeted families are receiving all benefits for which they are entitled and try to ease the difficulties faced in these homes by informing families of available services and giving them priority for those that are appropriate. Among the resources available to them are priority placement in day care centers for children in doubled up families, restaurant allowances for those with overtaxed or inadequate kitchen facilities, and persons trained in conflict resolution to try to ease family tensions and conflicts between landlords and tenants. Most centrally, the Housing Alert program emphasizes housing stability through legal intervention in landlord/tenant issues and assistance in ensuring the buildings are adequately maintained. However, Housing Alert workers cannot offer priority placement into permanent housing.

Based on this study's findings, it would appear that the Housing Alert model, with the appropriate resources, could be effective for many at risk families. For those who are targeted and who are primary tenants, assistance in ensuring adequate building maintenance, in preventing eviction, and in easing landlord/tenant tensions, could prevent homelessness. By targeting services at families who are still primary tenants, the agency has the possibility of intervening before the onset of housing instability leading to shelter use. Remembering that approximately 40 percent of those requesting shelter spent the most time last year in their own home, there is reason to believe that finding methods (like those considered in the Housing Alert model) to prevent the loss of that home could result in a significant reduction in homelessness. However, this optimism must be balanced by the fact that the targeting strategies considered in this study yield relatively small proportions of those who are primary tenants. The multivariate models considered in these reports, result in target populations with far less than 40 percent primary tenants. Overemphasis on stabilizing people in their own homes may prove unsuccessful under these conditions.

Among those who are doubled up (more than 60% of all the shelter requesters and an even greater proportion of those targeted), the Housing Alert model may also offer some possibility of reduced shelter use, or at least a delay in shelter use. For those living with their parents (14%), enhanced benefits in terms of day care and restaurant allowances may provide respite in what is typically an extremely crowded situation. Furthermore, the availability of dispute resolutions counselors might be useful under these tense situations, where the vast majority of the young women are pregnant or have new babies (nearly three-quarters). Of note, living with your parents is not, in and of itself, a predictor of homelessness; proportionally, many housed public assistance families also live in these extended family arrangements. Therefore, there is reason to believe that with extra resources, some of those at risk can find stability within their parent's apartment, at least for an extended period of time.

For those living with persons other than their parents (nearly half of those requesting shelter and, again, many more of those targeted), especially for those who were once primary tenants (19%), the Housing Alert model may be least effective as it is now operated. Although one may delay the shelter request by "sweetening" the resources available to these doubled-up families and ease some of the burden of crowding with such things as restaurant allowances, the data do not indicate that such situations can be readily stabilized. Living with those other than parents is a strong predictor of homelessness, and is also highly correlated with mobility. Relatively few public assistance families are managing to successfully maintain themselves in these situations for an indefinite period of time. This would mean that the Housing Alert program, as it now stands, would have only a limited opportunity for success with the vast majority of those targeted.

Housing Alert might be greatly strengthened if priority placement in permanent housing could be added to the program. Especially for those families doubled up under crowded and difficult circumstances, the ability of the case worker to stabilize the household for a discrete period of time might be far greater than his/her ability to stabilize it indefinitely. For families in these situations, there is a strong disincentive to stay out of the shelter system if their ability to obtain permanent housing is enhanced by entering emergency housing. Some proportion of permanent housing units could be dedicated to those families that Housing Alert has determined can remain in their present living situation for only a limited period of time.

In this way, Housing Alert can do more than postpone the inevitable entry into shelter; they can stabilize the family until they can make a placement into permanent housing.

Legal Services/Eviction Prevention Model

HRA has also made a commitment to reduce homelessness by making accessible legal counsel to those threatened with eviction. This strategy may be an appropriate means of intervention, but only for a limited portion of those at risk of homelessness. For those who have never been primary tenants (approximately 40% of the EAU sample) this method has no merit. Similarly, even among those who have had their own place, eviction is but one reason for loss of housing. Building conditions and crime are among the others cited.

The benefit of the eviction prevention model, is that it can be used in combination with a targeting strategy/Housing Alert approach. Whereas eviction prevention services would be of benefit to only a small proportion of those targeted as being at risk, such services do not have to be targeted in this manner. Legal assistance can be given to all those who are in danger of eviction; in this way it complements the targeting strategies which under represent primary tenants.

If evictions could be prevented, some reduction in homelessness would likely ensue. However, it is critical that this legal model incorporate extensive outreach. The data indicate that many who are evicted never make it to court. Thus, the program may not reach many of those who can benefit. Furthermore, formal eviction proceedings may never be initiated; rather families can be forced out in non-legal ways. Therefore, if a legal model to prevent eviction is to succeed in reducing homelessness among those who are primary tenants, it must reach out to those at risk and it must provide for assistance not only in preventing evictions but in ensuring proper building conditions and reducing landlord harassment.

Entitlement "Buffers"

There is little in the data to suggest that homelessness is caused by a single incident. That is, it does not seem that it is the loss of one check or the need for extra money for a particular week, that forces a family to enter shelter. Rather, it would seem that shelter requests are the result of the cumulative effects of a number of difficult and disruptive experiences.

The "buffer" model, in which the agency will provide emergency money at one time and "recoup" this money later, does not seem to be an effective strategy for preventing shelter entry. Rather, the need for an emergency check -- especially one that results from an administrative closing -- should instead be considered a signal that the family may have other needs which, if not met, will increase this family's risk of homelessness.

Homelessness does not typically result from one disruption (noting that this is not true for the "HPD" homeless); therefore, the use of "one-shot" supplements is not likely to be a sufficient remedy to the problems faced by at risk families.

Resettlement and Community Supports

Approximately one-third of those entering shelter have used the emergency housing system some time in the past. For these families, the appropriate time to have prevented the most recent episode of homelessness may well have been when the family left the shelter system in the past. Our study cannot speak to the kinds of policies or programs which would best enable families to become stably housed after leaving the emergency housing system. However, the need to ensure that effective programs are in place is surely reinforced by this study's findings. Among those homeless families targeted using the models discussed, the proportion of previous shelter users is even greater; their special needs must be considered foremost in the development of targeted services.

It would be useful to conduct follow-up research to try to identify which homeless families are likely to face the most difficulty in leaving the shelter (e.g., large families). Difficulty in leaving can be measured both in terms of long lengths of stay and in terms of frequent returns to the system.

Detoxification Programs

Although problems with substance abuse are reported by only a small number of homeless families, such families are at greatly elevated risk of becoming homeless. Given that having been in a detoxification facility is also associated with increased risk of shelter request, it would appear that programs aimed at rehabilitating those with drug and alcohol problems should also consider incorporating a housing component. Expansion of effective drug treatment programs, that provide for extended support in the housing arena, might be another method of reducing the incidence of homelessness among a portion of those at risk.

Regardless, any targeted homelessness prevention program would be greatly enhanced by the availability of detoxification and treatment services. Although only a small proportion of the homeless indicated such problems, the proportion among those targeted in likely to be much larger. Among those targeted by the complete model (using a three percent cut-off), 10 percent indicated a substance abuse problem and nearly 18 percent had been in detox.

Mental Health Programs

The data do not suggest that homelessness is the result of mental health problems but for very few cases. Programs that aim to reduce the incidence of such problems in this population as a means of reducing homelessness are likely to meet with only very limited success. Relatively few families at risk of homelessness can be assisted in this way. However, it is important to remember that mental health problems are likely to afflict a somewhat larger proportion of the targeted group and so the potential benefits of such services should be assessed accordingly.

Parenting Programs and Family Planning Services

There is strong evidence that pregnancy and childbirth represent a serious stress for many public assistance families, especially those who are young and doubled up. Although not traditionally thought of in terms of homelessness prevention, parenting classes, infant care facilities and family planning services may all be effective tools for reducing the incidence of homelessness, especially among young mothers. The agency needs to consider policies and programs aimed at these young, pregnant mothers, and consider the kinds of supports which might allow them to stay out of shelter. This might be an especially effective strategy for the group targeted, since both models considered in this report result in an especially high proportion of shelter requesters who are pregnant or who have new babies. By helping young mothers and their families cope with the stress of a newborn or a pregnancy, and by preventing unwanted pregnancies, we may be able to help keep some families out of emergency housing. Programs targeted at this population might be especially efficacious, given the potentially devastating effects of a shelter stay on infants and young children.

Foster Care

The relationship between foster care and group homes to homelessness is deserving of additional attention. Those who experienced such situations as children were more likely to be homeless as adults. For such people, the time to prevent adult homelessness may be during childhood. Greater attention must be paid to setting policies appropriate to nurturing a successful transition into independent, adult living arrangements for those whose care in childhood or adolescence has fallen to the state.

The Problems of Black Families

Black, public assistance families are more likely to require emergency shelter. They are at greater risk of having tenuous ties to the permanent housing market and this, in turn, increases their risk of needing emergency housing. Housing policies and programs must be examined to ensure that race and ethnicity do not place additional barriers in the way of low income black families who are seeking housing in an extremely difficult market.

V. CONCLUSIONS

Short of a miraculous increase in the availability of low-income housing, there is no one strategy that is going to solve the problem of homeless families in New York. However, several policies and programs are likely to have a significant, although incremental, impact on addressing the problem. In identifying those policies and programs, it should be clear that it is critical that the interventions be appropriately targeted to families and that there be a thoughtful match between the target population and the services offered. For some families the need is assistance in maintaining existing housing. For others, existing living arrangements may only be temporary and assistance must be offered in finding permanent housing. For others still, the interventions may, on the surface, appear to be unrelated to housing, but their long run impact will be to reduce those factors which contribute to a family's risk of homelessness.

Various targeting strategies and models result in serving distinctly different at risk families. In choosing the services to be offered we must be careful to find a clear congruity between our means for targeting, the population targeted, and the services that are offered.

Given the tremendous financial and social costs associated with emergency shelter, HRA's efforts to reduce the need for such shelter must be supported and expanded. The data suggest that these are families faced with a diversity of problems, but that many of these problems are potentially solvable with the right resources and the right tools.

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